

New Fiscal Plan for Puerto Rico

Restoring Growth and Prosperity

**As Certified by The Financial Oversight and
Management Board for Puerto Rico**

June 29, 2018

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- *The amount and timing of receipt of any distributions from the Federal Emergency Management Agency and private insurance companies to repair damage caused by Hurricanes María and Irma;*
- *The amount and timing of receipt of any amounts allocated to Puerto Rico and provided under the Community Disaster Loans Program;*
- *The amount and timing of receipt of any additional amounts appropriated by the United States government to address the funding gap described herein;*
- *The timeline for completion of the work being done by the Puerto Rico Electric Power Authority ("PREPA") to repair PREPA's electric system and infrastructure and the impact of any future developments or issues related to PREPA's electric system and infrastructure on Puerto Rico's economic growth;*
- *The impact of the measures described herein on outmigration; and*
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This New Fiscal Plan is based on what the Oversight Board believes is the best information currently available to it. To the extent the Oversight Board becomes aware of additional information after it certifies this New Fiscal Plan that the Oversight Board determines warrants a revision of this New Fiscal Plan, the Oversight Board will so revise it.

List of Acronyms and Key Terms

AACA	Automobile Accident Compensation Administration
AAFAF	Puerto Rico Fiscal Agency and Financial Advisory Authority (Spanish acronym)
ADEA	Agricultural Enterprise Development Administration (Spanish acronym)
Administration	Administration of Governor Ricardo Rosselló
ASEM	Puerto Rico Medical Services Administration (Spanish acronym)
ASES	Puerto Rico Health Insurance Administration (Spanish acronym)
BBB	Request for supplemental Federal assistance submitted on November 13, 2017 by the Government entitled Build Back Better Puerto Rico
CAFR	Comprehensive Annual Financial Report
CAGR	Compound Annual Growth Rate
Cardiovascular	Cardiovascular Center Corporation of Puerto Rico and the Caribbean
CDBG	Community Development Bank Grant
CDL	Community Disaster Loan from the CDL program
CFC	Controlled Foreign Corporations
CHIP	Children's Health Insurance Program (CHIP)
COFINA	Puerto Rico Sales Tax Financing Corporation (Spanish acronym)
COSSEC	Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives (Spanish acronym)
CRRO	Central Recovery and Reconstruction Office
DCR	Department of Corrections and Rehabilitation
DB	Defined Benefit pension plan
DC	Defined Contribution pension plan
DDEC	Puerto Rico Department of Economic Development Commerce (Spanish acronym)
DMO	Destination Marketing Office
DOH	Department of Health
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transportation
DPS	Department of Public Safety
DSA	Debt Sustainability Analysis
EEI	Electronic Export Information
EITC	Earned Income Tax Credit
ERS	Employee Retirement System
FDI	Foreign Direct Investment
Federal Government	The U.S. Federal Government
FEMA	Federal Emergency Management Agency
FMAP	Federal Medical Assistance Percentage (FMAP)
FOMB	Financial Oversight and Management Board for Puerto Rico
FQHC	Federally Qualified Health Center
FYTD	Fiscal-Year-To-Date
GAO	U.S. Government Accountability Office
GDB	Government Development Bank for Puerto Rico
GDP	Gross Domestic Product
GF	General Fund
GFEWG	Governor's Fiscal and Economic Working Group
GILTI	Global Intangible Low Income Tax
GNP	Gross National Product
GOSR	State of New York's Office of Storm Recovery
Government	Government of Puerto Rico
Governor	Governor Ricardo Rosselló
Hacienda	Puerto Rico Department of Treasury
HHS	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development
Hurricanes	Hurricane Irma and Hurricane Maria
IFCU	Independently Forecasted Component Units
IMF	International Monetary Fund
IPR	Invest Puerto Rico
Island	Puerto Rico
KPIs	Key Performance Indicators
LEA	Local Education Agency
March 2017 Fiscal Plan	Fiscal Plan certified by the Financial Oversight and Management Board in March 2017, before Hurricanes Maria and Irma hit the Island
MCOs	Managed Care Organizations
MFCU	Medicaid Fraud Control Units
Mi Salud	Medicaid program in Puerto Rico
MMIS	Medicaid Management Information System
NAP	Nutrition Assistance Program (Spanish: Programa de Asistencia Nutricional, PAN)
NRW	Non-Resident Withholdings

OCFO	Office of the CFO
OMB	Office of Management and Budget
P3	Public Private Partnerships
P3 Authority	Public Private Partnership Authority
PA	Public Assistance
Parties	AAFAF and the Government
PayGo	New pensions program by which agencies and instrumentalities are responsible for paying their pensions obligations on an annual basis via a "PayGo Charge"
PBA	Public Building Administration
Platino	Medicare Advantage program that also provides Medicaid wraparound services equivalent to Mi Salud program
PMO	Program Management Office
PMPM	Per Member Per Month
PRASA	Puerto Rico Aqueduct and Sewer Authority
PRCCDA	Puerto Rico Convention Center District Authority
PRDE	Puerto Rico Department of Education
PREC	Puerto Rico Energy Commission
PREMA	Puerto Rico Emergency Management Agency
PREPA	Puerto Rico Electric and Power Authority
PRHFA (or HFA)	Puerto Rico Housing Finance Authority
PRHTA (or HTA)	Puerto Rico Highway and Transportation AUTHORITY
PRIDCO	Puerto Rico Industrial Development Company
PRITS	Puerto Rico Information Technology Service
PROMESA	Puerto Rico Oversight, Management and Economic Stability Act
PRTC	Puerto Rico Tourism Corporation
PSC	Puerto Rico Public Service Commission
RFQP	Request for Proposal
SCO	State Coordinating Officer
SRF	Special Revenue Fund
SR	Structural Reform
SUT	Sales and Use Tax
SIFC	State Insurance Fund Corporation
TANF	Temporary Assistance for Needy Families
UPR	University of Puerto Rico
WIOA	Workforce Innovation and Opportunity Act

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EXECUTIVE SUMMARY

The people of Puerto Rico need and deserve plentiful good jobs, a dynamic and prosperous economy, affordable and reliable electricity, and an efficient and responsive public sector—but have not had any of these things for more than a decade. Instead, since 2005, the number of people living under the poverty level has increased, the economy has shrunk, electricity has remained expensive and unreliable, labor market regulations have remained burdensome—hindering job creation for the people—and the public sector has provided declining levels of service at a high cost to citizens. These problems predate Hurricanes Maria and Irma and will continue to plague Puerto Rico long after it recovers from the storms unless the necessary actions are taken. **This New Fiscal Plan for the Commonwealth of Puerto Rico (the “New Fiscal Plan”) details some of those necessary actions.**

Based on many of the Governor’s proposals and much of the Governor’s proposed fiscal plan, this New Fiscal Plan provides a blueprint of the structural reforms and fiscal measures that, if implemented, would have given Puerto Ricans what they need and deserve – a growing economy with more and better jobs, a twenty-first century electricity grid, resilient infrastructure, and an effective and efficient public sector.

Full implementation of this New Fiscal Plan also would have put Puerto Rico on the path to meeting the objectives laid out in the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA): achieving fiscal responsibility and balance within five years, regaining access to the capital markets, and restoring economic opportunity for the Island.

Unfortunately, the Legislature failed to rise to the challenge because it did not pass the most critical structural reform – turning Puerto Rico into an at-will employment jurisdiction – as the previous versions of the New Fiscal Plan required. Therefore, unless Puerto Rico adopts meaningful structural reforms in addition to those contained in the New Fiscal Plan, Puerto Rico will not be able to overcome the problems that have plagued Puerto Rico’s economy for over a decade, and the Government will have lost its window of opportunity to restore fiscal sustainability, regain access to capital markets, and achieve long-term economic growth and prosperity for the people of Puerto Rico.

* * *

Puerto Rico has been mired in an economic and demographic downward spiral for over a decade. The economy is \$16 billion smaller in real terms and the population is nearly half a million smaller (largely due to outmigration) than it was in 2005 – trends that, before Hurricane Maria, were projected to continue.¹ Today, over 40% of the population lives below the poverty line, over 40% are dependent on Medicaid for healthcare, and over 10% of the population is projected to leave the Island in the next five years to seek a better life elsewhere.² Meanwhile, the consolidated Commonwealth’s outstanding debt and pension liabilities have grown to over \$120 billion, with more than \$70 billion in financial debt and more than \$50 billion in pension liability – an amount almost twice the size of Puerto Rico’s economy.

These pre-Maria problems are not new and temporary – they are long-standing and structural. For decades, the private sector was overly reliant on now expired Federal tax advantages while having to operate in a difficult business climate with poor infrastructure, especially expensive and unreliable electricity and transit systems, a public sector that is significantly larger than

¹ The World Bank Group

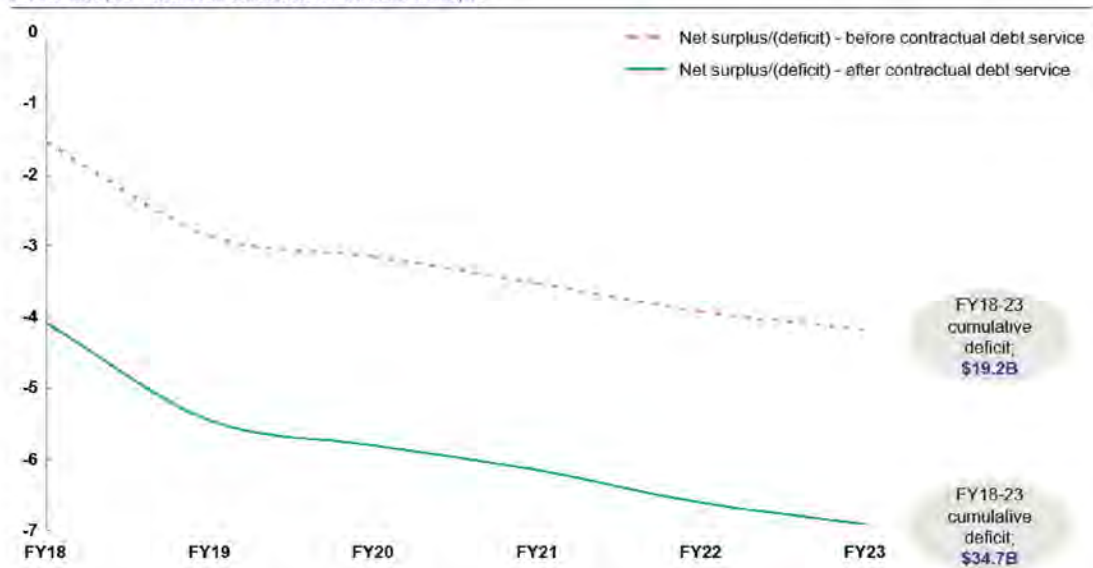
² American Community Survey and Center for Economic and Policy Research

the size of the typical U.S. state yet often has provided poor service, and a labor force participation rate that is among the very lowest in the world.

Puerto Rico has also had a budgeting problem for years, with actual revenues lower and actual expenses higher than projected, creating a growing general fund deficit (**Exhibit 1**). This general fund deficit is difficult to forecast with certainty, however, because of the protracted delays in issuing annual audited financial statements as well as lack of proper fiscal controls and poor financial management. Puerto Rico has also been in an economic structural decline for over a decade, which has meant an eroding tax base. Therefore, even before Maria, the primary deficit was growing consistently and considerably. To finance these primary deficits, Puerto Rico resorted to issuing debt which steadily became unsustainable. As the Oversight Board began its work, the Commonwealth was projected to run structural annual deficits exceeding \$7 billion, or \$3 billion before debt service.

EXHIBIT 1: PROJECTED PRE-MARIA DEFICIT BEFORE MEASURES AND STRUCTURAL REFORMS (PRE- AND POST- CONTRACTUAL DEBT SERVICE)

Puerto Rico pre Fiscal Plan deficit before Hurricane Maria, \$B



It was amidst these protracted demographic, fiscal, and debt crises that Hurricanes Maria and Irma hit the Island. Hurricane Maria has caused unprecedented and catastrophic damage to Puerto Rico, its people, and its businesses. According to current estimates, Hurricane Maria has created approximately \$80 billion in damage, and is projected to cause a real decline to GNP of 13.3% this fiscal year. On the other hand, over \$60 billion in Federal dollars is projected to be invested in helping Puerto Rico recover and rebuild from Hurricane Maria. The New Fiscal Plan is thus written assuming substantial and timely support from the Federal Government. This aid is projected to create temporary fiscal surpluses over the next several years, but will not change the underlying structural problems in Puerto Rico's economy, which must be dealt with expeditiously. While Puerto Rico will likely experience a brief stimulus from Federal disaster relief funding and is benefiting from a temporary reprieve from debt service due to PROMESA and Title III, Puerto Rico must change its underlying economic foundations to prevent fiscal imbalances from inevitably returning. Only by attacking the structural problems plaguing Puerto Rico will it have laid the groundwork for a new, growing, resilient economy.

Puerto Rico must urgently adopt a series of bold actions to improve its fiscal and economic trajectory. These reforms and measures are essential to restoring growth, opportunity, and prosperity to the people and businesses of Puerto Rico, and to making the Government of Puerto Rico more efficient, effective, and responsive to its citizens. None of these reforms or measures is more critical than human capital and welfare reform to improve Puerto Rico's historically dismal labor participation rate.

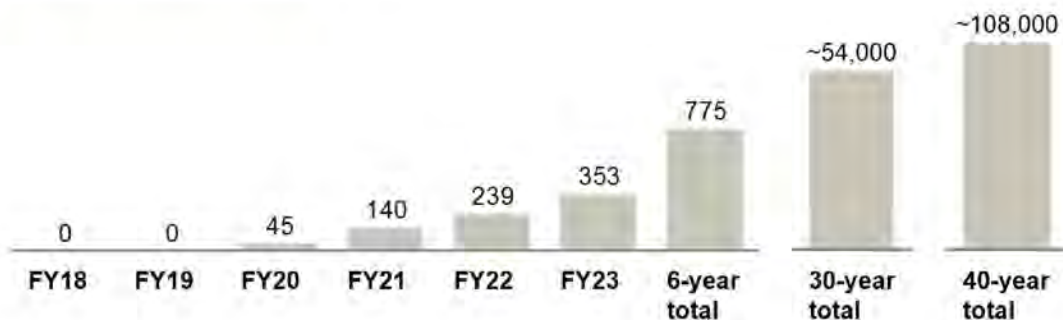
Structural reforms

The New Fiscal Plan proposes a series of reforms ("structural reforms") to improve the trajectory of the economy and drive growth (**Exhibit 2**):

- *Human capital and welfare reform:* promoting participation in the formal labor force by creating incentives to work through Earned Income Tax Credit (EITC) benefits and welfare reform and providing comprehensive workforce development opportunities. These measures are projected to increase economic growth by 0.30% by FY2022 due to EITC and labor reforms, and by an additional 0.26% from FY2033-2058 from long-term benefits of education and workforce development.
- *Ease of doing business reform:* promoting economic activity and reducing the obstacles to starting and sustaining a business in Puerto Rico through comprehensive reform to improve ease of paying taxes, importing and transporting goods, registering property, and obtaining permits. These reforms are projected to drive a 0.65% uptick in overall growth by FY2023.
- *Power sector reform:* providing low-cost and reliable energy through the transformation of PREPA and establishment of an independent, expert, and well-funded energy regulator. This is projected to increase growth by 0.30% starting in FY2020.
- *Infrastructure reform:* prioritizing economically transformative capital investments with Federal funds, and launching new operational initiatives to reduce the impact of transportation delays.

EXHIBIT 2: IMPACT OF STRUCTURAL REFORMS

Impact of structural reforms, \$M

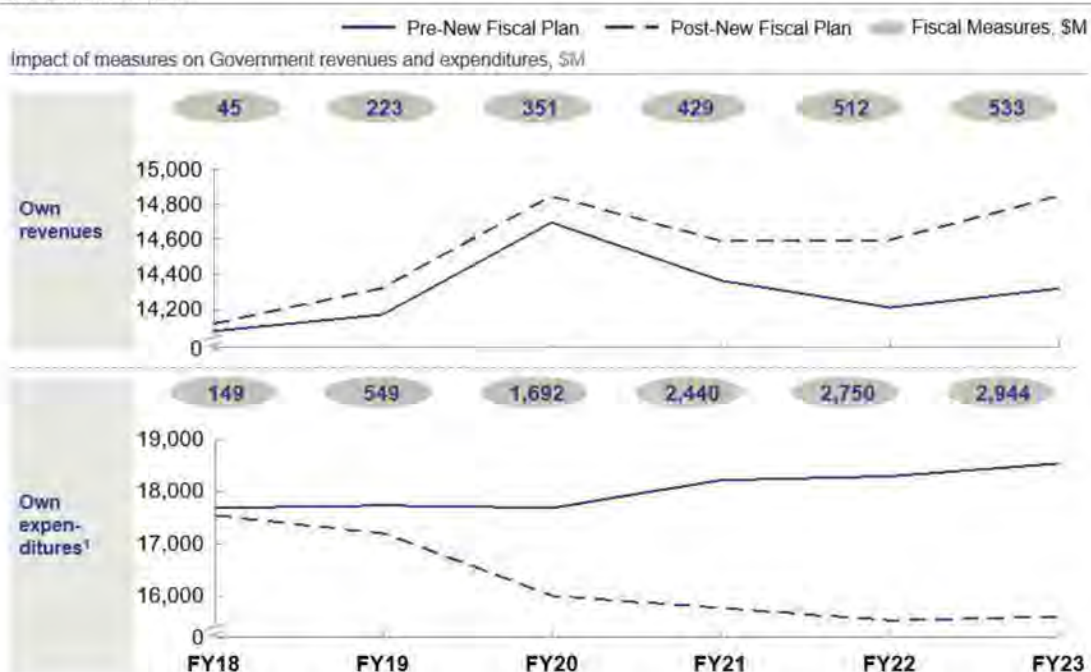


Fiscal measures

The New Fiscal Plan proposes a set of fiscal actions the Government must take ("measures") to increase Government revenues and reduce expenditures (**Exhibit 3**):

- *Enhancing tax compliance:* Employing new technology and other innovative practices to broaden the tax base, reduce fraud, and improve fairness to boost overall tax revenues.
- *Right-rating taxes and fees:* Adjusting existing taxes and fees to capture revenues from under-leveraged sources, such as the excise tax on crude oil (“CRUDITA”).
- *Agency efficiencies:* Consolidating agencies and deploying new management tools and practices to deliver better government services for substantially lower cost
- *Comprehensive pension reform:* Improving the financial stability of public employees’ retirement funds and ensuring payment of pensions
- *Reduction of appropriations:* Lowering the fiscal burden on the Commonwealth and encouraging sound fiscal self-management by reducing appropriations to municipalities and the University of Puerto Rico, while instituting an independent scholarship fund for low-income UPR students
- *Healthcare reform:* Reducing healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality, cost-effective care
- *Office of the CFO:* Instituting fiscal controls and accountability, reducing special revenue fund deficits, and improving governance, accountability, and transparency

EXHIBIT 3: IMPACT OF REVENUE AND EXPENSE MEASURES ON OWN REVENUES AND EXPENDITURES

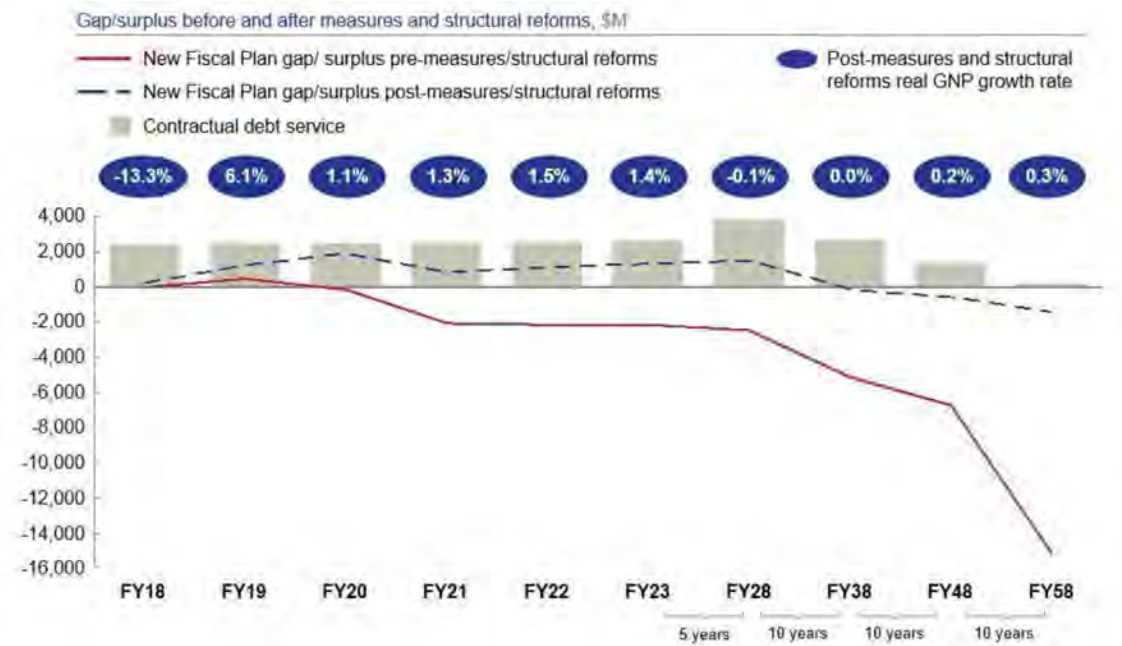


¹ Own Expenditures includes all CW, Federally funded, and SRF Medicaid expenses and excludes CW and Federally funded social programs; pre-measures, own expenditures increase between FY20 and FY21 due to Medicaid Supplemental Funding phase out

Implementing these structural reforms and fiscal measures, which will provide low-cost and reliable energy, robust infrastructure, more incentives to enter the formal labor market, an improved regulatory and permitting environment, and a more effective and

efficient public sector, will enable companies to grow and prosper, leading to more and better jobs for residents and a stronger tax base for the Government.

EXHIBIT 4: NEW FISCAL PLAN PROJECTED SURPLUS BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS



Puerto Rico cannot afford to meet all its contractual debt obligations, even with aggressive implementation of these reforms and measures. Puerto Rico is committed to repaying an affordable and sustainable amount of its outstanding debt and to treating its creditors equitably; however, it needs a comprehensive restructuring of its debt – in addition to the adoption of pro-growth structural reforms – to have renewed access to the capital markets and to create the basis for a sustainable economy. The best time to implement these reforms and restructure the debt is while Puerto Rico has the temporary benefits of Federal disaster relief funding and a stay on debt service. Therefore, time is of the essence. The New Fiscal Plan calls for ambitious and immediate action to return opportunity and prosperity to Puerto Rico as soon as possible.

PART I: Context for Puerto Rico's current economic and fiscal challenges

Chapter 1. LONG-TERM ECONOMIC TRENDS IN PUERTO RICO

Before being hammered by the most powerful hurricane to strike the Island in almost a century, Puerto Rico's economy had been in an acute structural decline for over a decade, the Government had defaulted on debt exceeding the size of Puerto Rico's annual GNP, and nearly half of Puerto Ricans lived below the national poverty line. The reasons for these problems are multiple, but the root causes stretch back 40 years.

In the 1940s and 1950s, led by Operation Bootstrap, Puerto Rico's economy grew rapidly and productivity increased by 5% per annum as it transitioned from an agricultural-led to a manufacturing-led economy. However, as economic performance began to decline in the 1970s, the Federal Government adopted two significant policies to help Puerto Rico shore up its economy.

First, transfer programs increased dramatically, particularly as Puerto Rico started receiving Nutritional Assistance Program (PAN) funding, eventually providing, in aggregate, a portion of residents' personal income that was twice the U.S. mainland average. In addition to raising costs for the Puerto Rico budget, these programs at times created disincentives to work due to benefits that were high relative to wages available in the formal labor market.

Second, in 1976, Section 936 of the Federal tax code was introduced to promote investments by companies that could transfer their "intangible assets" to Puerto Rico, and thereby shift profits to the Island. These Section 936 companies, which were mostly in pharmaceuticals and life sciences, became a pillar of Puerto Rico's economy, creating valuable local supply chains, local banking deposits, and contributing substantial tax revenue. In the same year, Puerto Rico passed Law 80, which instituted protections against wrongful discharge for Puerto Rican workers, and mandated severance for firms attempting to remove employees. This law made Puerto Rico's labor market significantly more rigid and placed it out of step with the prevailing labor markets in the mainland U.S. (especially markets with which Puerto Rico competes for companies and talent, such as Florida).

In 1996, Congress decided to end Section 936, gradually phasing it out by 2006. In the face of an anemic local private sector, the Government also expanded its employment to the point that by 2000, 30% of Puerto Rico's jobs were in Government and a full 40% of workers with college degrees worked in the public sector. Large sectors like water, electricity and ports are still run by public corporations, and have consistently created a drain on the economy by delivering lower quality services at high costs while crowding out private investment. There is also pervasive cross-subsidization between the Government and public corporations and other parts of the public sector—such as free electricity to municipalities—that obfuscates financial management and accountability. There is also a high degree of political interference in decisions that affect every aspect of Puerto Ricans' lives. As a result, today Puerto Rico underperforms on all important measures of a modern economy, including educational attainment, cost of electricity, quality of water, tax compliance, and labor market participation.

To promote the private sector, the Government undertook a broad tax incentives policy that led to a highly complex web of subsidies and special tax arrangements. These actions neither

promoted growth nor treated companies equitably. Furthermore, generous Government transfer programs, in addition to Federal transfer programs, boosted incentives to resulted in many workers choosing not to work, or to receive benefits and work in the informal economy without paying taxes. Tax compliance has never been adequate in Puerto Rico, and it became increasingly difficult in this environment.

Government revenues suffered and became increasingly hard to forecast. To make up for this recurring and growing budgetary shortfall, the Commonwealth turned to debt markets. Puerto Rico bonds found themselves into every corner of the U.S. bond market and, as investor appetite began to wane, the Government turned to securing new debt by pledging various revenue streams. The result was a highly complex financial structure that limited transparency and financial accountability and management.

When the Great Recession hit in 2008, Puerto Rico's economy was already in a fragile fiscal and financial position. Since then, the economy has continued to worsen – Puerto Rico has seen its GNP shrink by 20%, labor participation has fallen to a record low of 38%, and the Island's population has fallen by 10%. Today, Puerto Rico is much poorer relative to the U.S. than it was in 1970.

Chapter 2. ENACTMENT OF PROMESA

By 2016, Puerto Rico had accumulated over \$50 billion in unfunded pension liabilities and over \$70 billion of debt, and was facing an imminent default. Because Puerto Rico and its public corporations cannot take advantage of Chapter 9 of the U.S. Bankruptcy Code, and an attempt to create a territorial bankruptcy law was struck down by the U.S. Supreme Court, Congress stepped in to head off Puerto Rico's financial and debt crisis by passing PROMESA, the Puerto Rico Oversight, Management, and Economic Stability Act. PROMESA imposed an automatic stay on Puerto Rico's debt obligations and created the Financial Oversight and Management Board for Puerto Rico (the "FOMB" or "Oversight Board"). The Oversight Board is tasked with restructuring Puerto Rico's staggering debt burden and restoring sustained economic growth to Puerto Rico so that the Government can achieve fiscal balance and access to the capital markets.

Immediately after its formation, the Oversight Board began working with the Government of Puerto Rico to create a fiscal plan that would help the Government achieve fiscal responsibility and regain access to the capital markets. The outcome of this work was the Commonwealth Fiscal Plan that the Oversight Board certified on March 13, 2017 (the "March 2017 Certified Fiscal Plan"). A few months later, the Oversight Board filed for Title III for the Commonwealth Government, COFINA, HTA, ERS, and PREPA.

In September 2017, just months after the certification of the March 2017 Fiscal Plan, Hurricanes Irma and Maria struck the Island, causing great devastation and fundamentally altering the Island's macroeconomic reality.

Chapter 3. IMPACT OF HURRICANES MARIA AND IRMA

On September 6, 2017 and September 20, 2017, Hurricanes Irma and Maria struck Puerto Rico, causing unprecedented humanitarian, economic, and infrastructure-related damages and upending the daily lives of Puerto Rico's over 3 million residents. Thousands of residents

were left homeless, basic utilities were completely shut down (and have taken months to become operational), and schools, hospitals, and businesses were destroyed. Tens of thousands of Puerto Ricans fled the Island. The Federal Government's response has become one of the largest and most complex disaster recovery efforts in U.S. history.

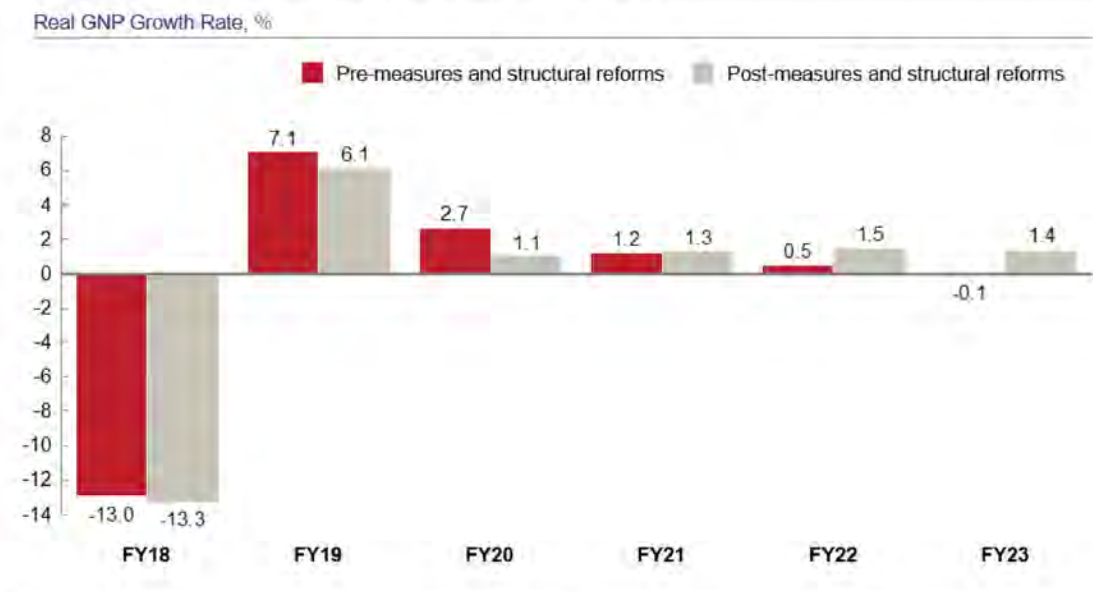
The damage inflicted on Puerto Rico by Hurricane Maria required that the March 2017 Certified Fiscal Plan be revised. Therefore, on October 31, 2017, the Oversight Board formally requested that the Governor submit a revised fiscal plan for the Commonwealth, as well as for its various instrumentalities. After months of hard work, engagement with stakeholders, and intense negotiations with the Government, the Oversight Board determined that this fiscal plan complies with the requirements of PROMESA, and accordingly, is proceeding to certify it as the New Fiscal Plan.

PART II. Puerto Rico's path to fiscal and economic sustainability

Chapter 4. MACROECONOMIC AND DEMOGRAPHIC TRAJECTORY POST-MARIA

The New Fiscal Plan must grapple with how the shock of Hurricanes Irma and Maria will create a new economic reality for Puerto Rico in the years to come. Given this context, the New Fiscal Plan projects there will be macroeconomic volatility in the wake of the storms. In FY2018, there is projected to be a major decline in GNP, followed by a partial bounce-back in FY2019 due to disaster relief funding, then a return to slightly above trendline by FY2023 due to the impact of structural reforms.

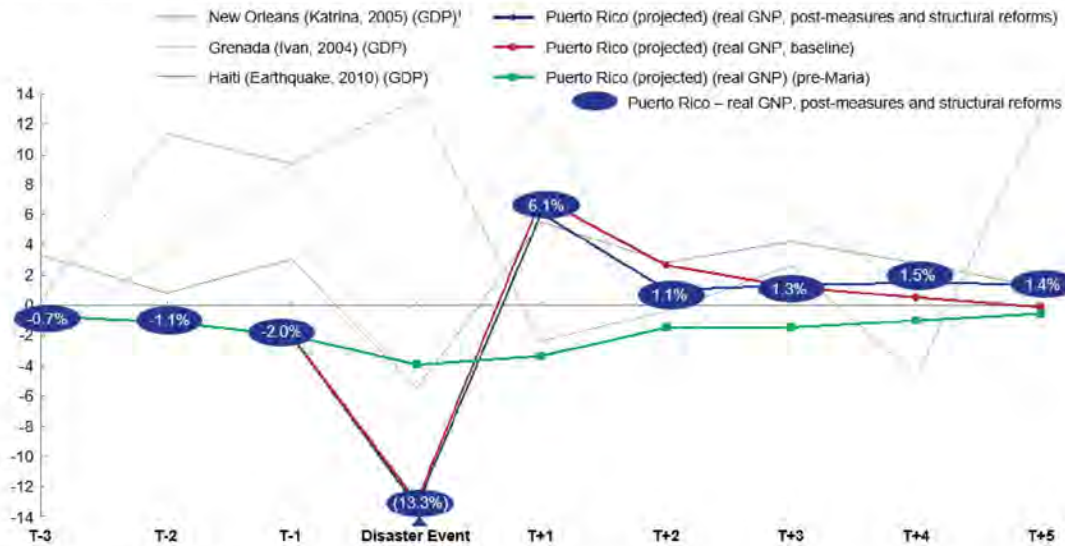
EXHIBIT 5: REAL GNP GROWTH RATE, BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS, INCLUSIVE OF DISASTER RELIEF SPENDING



This trendline has similarities to the growth trendline faced by other jurisdictions that have suffered from major natural disasters (**Exhibit 6**).

EXHIBIT 6: PUERTO RICO'S PROJECTED GROWTH TRAJECTORY COMPARED TO OTHER JURISDICTIONS AFTER NATURAL DISASTERS

Puerto Rico's projections track with other areas suffering from natural disasters, T = year of shock, constant local currency units (LCU) unless otherwise stated, year on year change



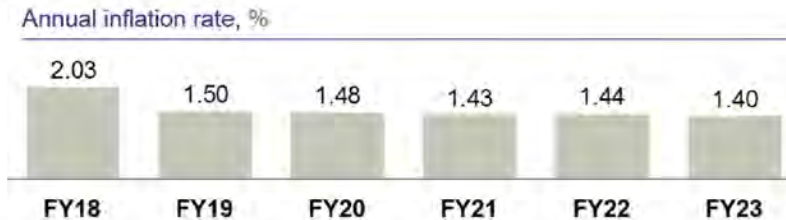
¹ Katrina figures not adjusted for inflation

SOURCE: World Bank, Bureau of Economic Analysis, and ECCB

The economic outlook model, which forecasts GNP growth, primarily relies on a comprehensive data set on the Puerto Rican economy from 1965 to 2017. It includes dozens of variables that collectively describe the Puerto Rican economy (e.g., growth, population, capital stock, etc.),³ and is largely impacted by four major factors: a) the pre-hurricane trendline of Puerto Rico, b) short- and long-term impacts from the storm on economic activity and capital stock, c) the stimulative impact of disaster relief assistance (*discussed in Section 4.1*), and d) proposed fiscal consolidation measures and structural reforms (*discussed in Section 4.2*).

These factors result in a 13.3% decline in real GNP for FY2018, which is directionally in line with the Fiscal-Year-To-Date (FYTD) activity of the Puerto Rican Economic Activity Index (EAI) – a metric that historically tracks closely with GNP. From July to December of 2017, EAI was down 9.4% from the previous year. **Projected inflation rates (Exhibit 7)** serve as proxy for the GNP deflator yielding nominal GNP growth rates of -11.6 to 7.7% each year, while real GNP grows in the range of -13.3 to 6.1% each year.

EXHIBIT 7: ANNUAL INFLATION RATE



³ The forecast relies on a 60-year comprehensive dataset and applying statistical regressions to show the effects of multiple yet distinct inter-related components of past hurricanes, exogenous developments, and economic policies on growth and inflation

4.1 Disaster relief spending

Disaster spending tends to have a major stimulative effect on an economy post-crisis.⁴ In Puerto Rico, the level of public and private disaster relief spending is anticipated to be significant when compared to the overall size of the economy. Public and private disaster relief spending will impact the economy in two ways:

- **Stimulative impact over the life of the plan caused by spending on the Island that is expected to be nearly 100% of the Island's projected 2018 GNP.** This stimulus can come in multiple forms such as construction companies hiring local, unemployed workers or workers from the mainland U.S. paying local withholding taxes and spending money for food and lodging.
- **Expected refurbishment of the capital stock on the Island.** The New Fiscal Plan factors in significant damage to capital stock that is repaired, in large part, by this significant infusion of federal and private monies, contributing to the bounce-back anticipated in FY2019 and for the bump in growth above pre-Maria trend thereafter.

The New Fiscal Plan projects that ~\$62 billion of disaster relief funding in total, from Federal and private sources, will be disbursed in the reconstruction effort. It will be used for a mix of **individual assistance** (e.g., reconstruction of houses, personal expenses related to the hurricane such as clothing and supplies), **public assistance** (e.g., reconstruction of major infrastructure, roads, and schools), and to cover part of **the Commonwealth's share of the cost of disaster relief funding** (states often must match some portion of Federal public assistance spend⁵).

Of that, **~\$35 billion** is estimated to be used for **public assistance** (between FEMA, CDBG, other Federal agencies, and Commonwealth match spend) **~\$19 billion for individual assistance** (between FEMA and CDBG funds), and **~\$8 billion** will be used for **private and business insurance** pay outs. Finally, **\$375 million** in CDBG funding is estimated to be allocated to offset the Commonwealth's **expected cost-share requirements** under Federal programs (which is ~\$1.0 billion over six years).

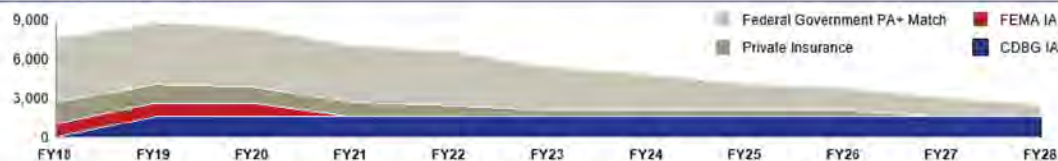
⁴ Relief aid after the Haitian Earthquake represented nearly 200% of overall GDP, providing a major economic "cushion" after the disaster. In Grenada, disaster aid equaled about 2/3 of GDP at the time, and despite declines immediately after the hurricane, revenues returned to pre-storm levels after about two fiscal quarters and growth rebounded quickly. The year after Hurricane Ivan (2005) Grenada's economy grew at a faster rate than any year since 1985, at a clip of 12.5%

⁵ The New Fiscal Plan only contemplates cost share paid for by the Commonwealth (and UPR), not PREPA / PRASA or HTA.

EXHIBIT 8: PROJECTED PRIVATE AND PUBLIC DISASTER RELIEF FUNDING AND ROLL OUT

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total, \$M	Total, %
	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %	\$M, %		
Federal Public Assistance + PR Match¹	\$4,938	\$4,762	\$4,585	\$4,409	\$4,232	\$3,351	\$2,822	\$2,116	\$1,764	\$1,411	\$882	\$35,271	56.5%
	14.0%	13.5%	13.0%	12.5%	12.0%	9.5%	8.0%	6.0%	5.0%	4.0%	2.5%		
CDBG-DR²	-	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$1,603	\$16,025 ⁴	25.7%
		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
FEMA Individual Assistance³	\$1,027	\$1,027	\$1,027	-	-	-	-	-	-	-	-	\$3,081	4.9%
	33.3%	33.3%	33.3%	0%	0%	0%	0%	0%	0%	0%	0%		
Private Insurance⁴	\$1,668	\$1,460	\$1,251	\$1,043	\$834	\$436	\$436	\$436	\$436	-	-	\$8,000	12.8%
	20.9%	18.3%	15.6%	13.0%	10.4%	5.4%	5.4%	5.4%	5.4%	0%	0%		
Total	\$7,633	\$8,851	\$8,466	\$7,054	\$6,669	\$5,389	\$4,860	\$4,155	\$3,802	\$3,013	\$2,484	\$62,377	100%
Spending as a % of GNP	12.2%	13.2%	12.3%	10.0%	9.1%	7.2%	6.3%	5.3%	4.7%	3.7%	3.0%		
CDBG cost share	0	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$38		

Disaster aid by source of funding, \$M



¹ Includes \$2B of CDBG funding allocated specifically for electrical infrastructure based on CSA estimates

² \$3B is current FEMA projected funding for Maria-related disasters

³ Based on early analysis of data from the Office of the Insurance Commissioner of Puerto Rico on already processed payments

⁴ Excludes CDBG excepted cost match which is included as an offset for cost share

The major sources of disaster relief funding are detailed below:

- **FEMA Disaster Relief Fund (DRF):** FEMA provides Individual Assistance to individuals and families who have sustained uncovered losses due to disasters. FEMA also provides Public Assistance for infrastructure projects and other permanent improvements.⁶
- **HUD Community Development Block Grant- Disaster Recovery (CDBG-DR):** Based on a housing recovery plan, HUD provides CDBG-DR funding that can be used for assistance to individuals (e.g., housing repair) and public assistance (e.g., infrastructure development), or can also be used by the Government for certain operational costs (e.g., to cover their disaster relief funding match.) The supplemental appropriation included in the Bipartisan Budget Act of 2018 stipulated that at least ~\$2 billion be used to repair the Island's electric infrastructure (Public Assistance).
- **Private insurance funding:** Large personal property and casualty losses have been incurred in the aftermath of Hurricane Maria. Early analysis of data from the Office of the Insurance Commissioner of Puerto Rico, adjusted for self-insured and other types of coverage, was used to determine the amount that will be paid out to individuals and businesses for major damages.

Disaster roll out for FEMA funds, CDBG funds, and private spending have been projected separately:

- **Roll out of Public Assistance and private insurance funds.** It is estimated to take time for the Puerto Rican Government to meet the requirements necessary to access FEMA

⁶ The New Fiscal Plan does not account for Operations and Administration funding, which only flows to federal agencies. Rather, it looks at funds that are spent for reconstruction on-Island, though those funds could flow to firms that are local or external

funding.⁷ As a result, projected roll out declines over time and is spread out as shown in **Exhibit 8**.

- **Roll out of CDBG.** It is estimated to be even slower given the length of time typically needed for the application and disbursement process. As a result, projected roll out is spread out over time, as shown in **Exhibit 8**.

In assessing impact of disaster relief funding on the economy of Puerto Rico, it is important to isolate what portion of the disaster relief funding directly affects the local economy and what portion flows to entities off-Island. The Plan estimates that, on a weighted average basis, **12.5% of funds will directly impact the local economy.**⁸ This figure is estimated using a weighted individual and public assistance (FEMA and non-FEMA) and is supported by history of previous FEMA spending.

GNP is projected to rebound quickly in FY2019 in large part due to disaster relief funding, and this has a direct positive influence across most revenue categories.

4.2 Impact of fiscal measures and structural reforms

By optimizing revenue collection and reducing government-wide expenses, **fiscal measures** seek to streamline and transform the Government of Puerto Rico to a size appropriate for its population. Such policy actions, inescapably, will generate a contractionary impact on the economy in the short term, but are necessary to drive fiscal sustainability in the long term. In fact, they drive significantly more in savings than revenues lost due to economic contraction. In addition, the economic contraction from cost-saving measures is limited in the long-term, while such measures are critical for providing long-term financial stability. The macroeconomic impact of the measures is summarized in **Exhibit 9** below.

EXHIBIT 9: MACROECONOMIC IMPACT OF FISCAL MEASURES, INCLUSIVE OF DISASTER RELIEF SPENDING



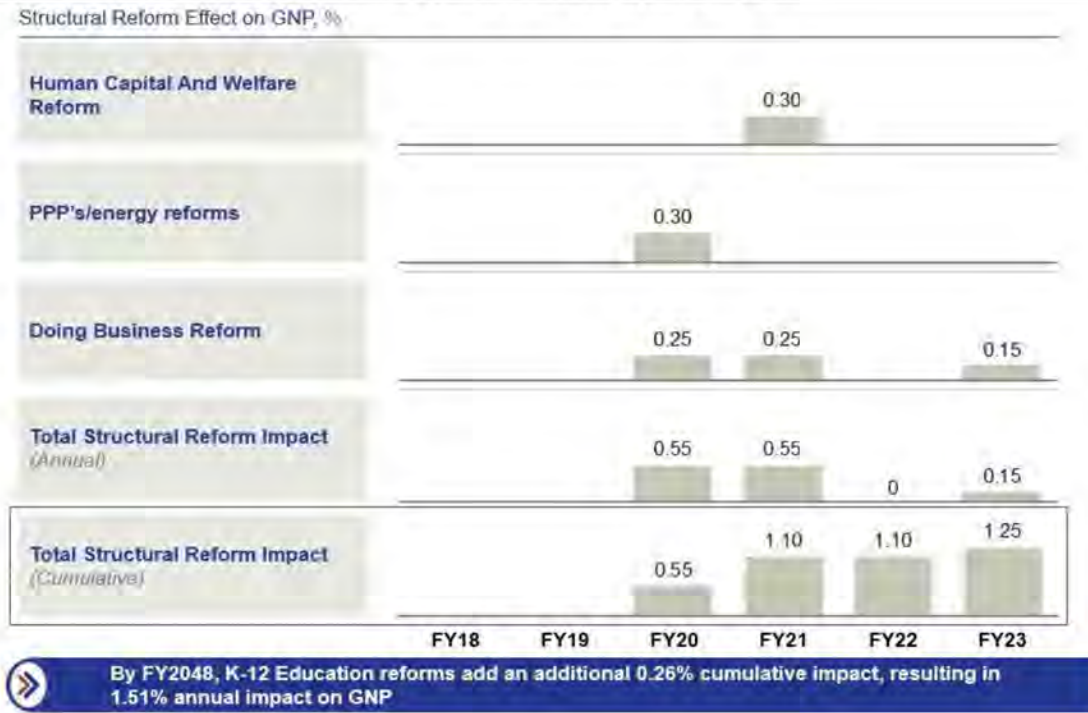
The timing and impact of **structural reforms** are based on work done by the IMF on similar reforms implemented in Europe (e.g., Spain, Estonia), South America (e.g., Peru, Colombia), among other jurisdictions, utilities reform in Latin America, and broadly accepted metrics for measuring improvement in the World Bank's Ease of Doing Business Rankings. Structural

⁷ According to FEMA and Government reports, FEMA spend in Puerto Rico has been slower than anticipated in 2018. It has also been slower in Puerto Rico than in other natural disasters to which FEMA has responded in 2018 (*Economist*, 2018)

⁸ Estimated using local contracts (e.g., PREPA contract representing public project assistance and a multi-unit residential construction project representing Individual Assistance, which were estimated to have a 10% and 17% pass-through on the economy, respectively). Maintenance and repair of projects related to individual assistance have less specialized requirements and can expect a larger pass through from direct labor. Historical FEMA spending and the percentage of DHS contracts awarded to local Puerto Rican firms supported this figure

reform benchmarks broadly come from nations or jurisdictions without monetary policy options and high informal labor markets, like Puerto Rico. **Labor, energy, and doing business, reforms** are projected to increase GNP by **1.25 % by FY2023 (Exhibit 10)**. **K-12 education reforms** add an additional 0.01% annual impact beginning in FY2033, resulting in total GNP increase of **1.51% by FY2048**.⁹

EXHIBIT 10: MACROECONOMIC IMPACT OF STRUCTURAL REFORMS



4.3 Population projections

In the past five years, Puerto Rico's population has trended downward by 1-2% every year as residents have left to seek opportunities elsewhere and birth rates have declined.¹⁰ This trend accelerated after the storm, as many lost houses, jobs and loved ones. While some of these people are projected to return as the Island rebuilds, population is still projected to decline over the period of the New Fiscal Plan – by ~12% over five years (**Exhibit 11**).¹¹ Much of this is based on estimated net departures in FY2018, while in the long term, population is projected to continue to decline, but at a rate closer to pre-hurricane trends. One key element of the population projection is the assumption that the low historical rate of immigration into Puerto Rico will continue.

⁹ The impact of educational / human capital structural reforms is 0.26% by FY2058

¹⁰ Federal Reserve Bank of St. Louis Economic Research (FRED)

¹¹ The New Fiscal Plan adopts demographic projections calculated by the Oversight Board's demographer. The projections were initially presented in an Oversight Board listening session held on November 16, 2017 and have since been updated to incorporate the latest available migration data and economic growth projections, as well as real-time estimates of population loss since the hurricane (e.g. net airplane departures)

EXHIBIT 11: PROJECTED POPULATION CHANGE



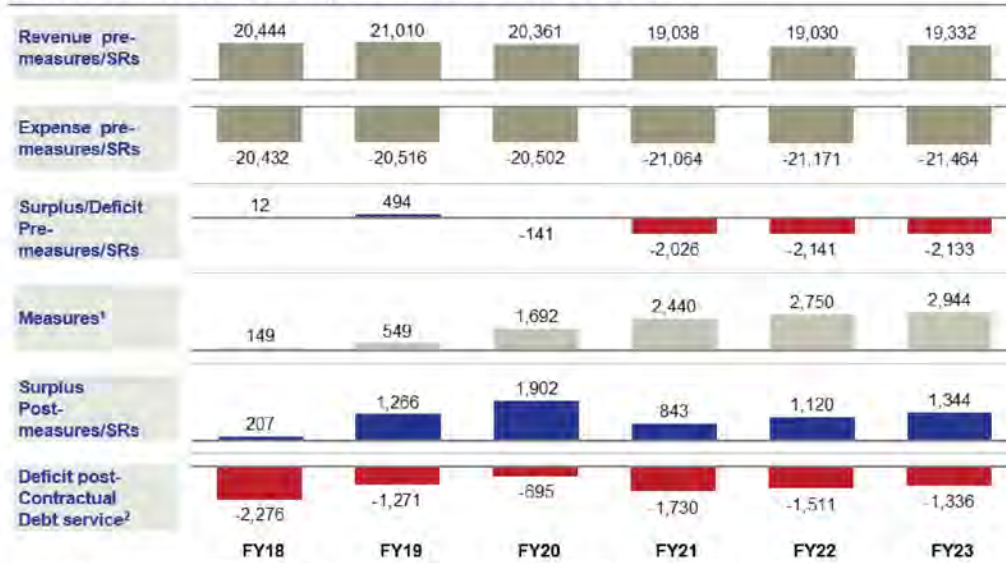
Chapter 5. FISCAL PLAN FINANCIAL PROJECTIONS

Before measures and structural reforms (“baseline forecast”), there is a pre-contractual debt service surplus in FY2018-23, in part due to revenues buoyed by a positive macroeconomic trajectory resulting from the massive disaster relief funding stimulus, as well as significant Federal Medicaid funding. Over the long term, in the baseline forecast this surplus is not sustainable, as Federal disaster relief funding slows down, Supplemental Medicaid funding phases out, Act 154 and Non-Resident Withholding revenues decline, and pensions and healthcare expenditures rise. Without major Government action, the Island would suffer an annual primary deficit of over \$1.9 billion starting in FY2021.

Fiscal measures and structural reforms contained in the New Fiscal Plan also help transform the deficit into a surplus for the life of the Fiscal Plan, as structural reforms will drive a 1.51% increase in growth (by FY58), and fiscal measures will drive ~\$10.5 billion in savings and extra revenue by FY2023. However, even after fiscal measures and structural reforms and before contractual debt service, there is an annual deficit reflected in the projection starting in FY2036, due insufficient structural reforms, including restrictive labor policies that prevent high growth. After contractual debt service, this deficit drops to much more severe annual deficit for all years of the plan (**Exhibit 12**).

EXHIBIT 12: PROJECTED DEFICIT / SURPLUS PRE- AND POST-MEASURES AND STRUCTURAL REFORMS

Projected deficit / surplus pre- and post- measures and structural reforms, \$M



¹ Impact of measures has a contractionary effect on economy, thus pre-measures revenues less pre-measures expenses plus measures does not equal post-measures and structural reforms surplus

² Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt. Excludes HTA, UPRA, PREPA, PRASA, Children's Trust

5.1 Baseline revenue forecast

Major tax revenue streams (**Exhibit 13**) include non-export sector General Fund revenues (including individual, corporate, and sales and use taxes) and export sector revenues (including Act 154 excise taxes paid by multinationals operating on the Island, and Non-Resident Withholdings), as well as Federal funding.

EXHIBIT 13: MAJOR REVENUE CATEGORIES

Key Baseline Revenue Drivers, Pre-measures and structural reforms, \$M

PII	1,788	1,823	1,975	2,030	2,090	2,149
CU	1,340	1,443	1,480	1,521	1,566	1,610
SUT	2,291	2,463	2,520	2,590	2,667	2,742
Act 154	1,761	1,633	1,551	1,303	1,026	1,026
NRW	569	539	539	512	478	483
Other	2,290	2,337	2,364	2,389	2,392	2,375
Federal Funds	6,381	6,921	5,860	4,881	4,851	5,020
Total	16,409	17,307	16,298	15,227	15,181	15,406
	FY18	FY19	FY20	FY21	FY22	FY23

5.1.1 Non-export sector General Fund revenue projections

In the aftermath of the hurricanes, actual tax receipts have been closely monitored to measure the near-term fiscal impact. Using these actuals and other inputs, the New Fiscal Plan projects a drop of ~14% in General Fund revenues in FY2018, adjusted for one-off events.¹²

Individual income taxes: Individual income taxes are concentrated, with 78.2% of revenues coming from the 8.7% of returns reporting income above \$60,000 per year. Revenues from individual income tax were down ~3% as of February, relative to FY2017 actuals.¹³ This likely reflects most of the impact of the hurricane on wage earnings, but it is possible that estimated tax payments (e.g., by self-employed or high net worth individuals) are running ahead of where they will be at year end, at which point there could be large refund claims. To account for this risk, Hacienda has estimated that a marginal additional increase in deductions in FY2018 will drive a \$112 million negative variance.¹⁴ With this \$112 million in extra deductions, income tax revenues for FY2018 are projected to be ~8% lower than in FY2017 when adjusted for extraordinary items.

Corporate income taxes: There is also concentration in tax receipts among the largest corporations operating in Puerto Rico (e.g., ~29% of corporate income tax is paid by 20 corporate taxpayers).¹⁵ As of February, corporate tax revenues were down ~11% FYTD relative to FY2017, and are projected to continue this trend. Finally, Hacienda has projected personal

¹² The New Fiscal Plan estimates for income taxes and SUT for FY2018 are based on actuals through February 2018, with the five-month post-storm average trend line continuing through the end of the fiscal year. Additional adjustments are included for income taxes and corporate taxes due to the expected deductions for unreimbursed property damage

¹³ All actuals are adjusted to normalize for extraordinary non-recurring item

¹⁴ This calculation is based on casualty and personal property loss estimates from Hurricane Georges, and the impact is intensified (by about 4x) to account for the increased severity of Maria. Hacienda's analysis here would result in ~20% increase in tax refunds/ deductions, which is in-line with the impact seen on U.S. Federal tax refunds in 2001 and 2008, in the aftermath of two large economic recessions

¹⁵ Hacienda historical reports

property, casualty, and business interruption losses will result in a \$102 million marginal fall in corporate tax revenues. The current trendline, in addition to these deductions, results in an adjusted year over year decline of 18.6% from FY2017.

Sales and use taxes (SUT):¹⁶ As of February, SUT revenues were down ~9% FYTD relative to FY2017, but had fallen 14.3% since the hurricane – a trend that is projected to apply to the rest of the fiscal year. Unlike income taxes, where monthly cash flows can only help approximate annual tax liabilities, sales and use taxes are collected throughout the year and remitted on a regular basis (varies depending on size of taxpayer). Emergency measures taken by the Government immediately after the hurricanes account for ~\$100 million in losses, while outmigration, business closures, and general disruption (e.g., due to power outages) will likely account for the rest of the drop. The application of this base trend through June 2018 results in a year-over-year decline of ~10.4% from FY2017 (inclusive of non-General Fund SUT funds such as CINE, FAM, and COFINA).

Other General Fund Revenue (Motor Vehicles, Alcoholic Beverages, Cigarettes): The 2018 trendline for other General Fund revenues is projected to continue in line with post-Maria actuals to date, resulting in a 2.2% increase for alcoholic beverages, a 25.4% increase for cigarettes, a 14.3% decline for motor vehicles, and a 28% decline for “other general fund revenues” which includes fees/penalties and dividend taxes (all figures are relative to 2017 actuals and adjusted for extraordinary events and Commonwealth policies on tax exemptions and holidays in response to the storm).¹⁷

5.1.2 Export sector revenue projections

Act 154 and Non-Resident Withholding (NRW) tax revenues have proven to be far less resilient than other types of revenues after the hurricane.¹⁸ For FY2018, Act 154 is expected to decline ~15%, and NRW revenues are projected to decline ~15%. Both revenue types are concentrated in a small number of multinational corporations, and the absence of payments from large payers in previous years has had an impact on the overall trendline of these revenues. From FY2017 to FY2023, Hacienda estimates that ~51% of Act 154 and 28% of NRW revenues will erode (**Exhibit 14**) due to the combination of Federal tax reform (reducing Puerto Rico’s attractiveness as a low tax jurisdiction for multinationals) and hurricane impacts (creating challenges restoring manufacturing operations and exporting). In some cases, these disruptions revealed concentration risk in Puerto Rico that manufacturers may consider in making future business continuity plans.

¹⁶ All analyses for the purposes of the New Fiscal Plan are all-inclusive of sales and use tax revenues. Monthly and quarterly general fund SUT trends are variable due to differences in year over year timing of when COFINA and other caps are hit

¹⁷ While these numbers are not adjusted for deductions, they are adjusted for what Hacienda views to be “one-off events.” For example, Hacienda removed \$13M from cigarette taxes in Nov. 17 due to non-recurring promotions offered by gas stations and convenience stores, and removed \$18.3M from motor vehicle taxes due to a spike in car sales promotions

¹⁸ As of February 2018

EXHIBIT 14: PROJECTED ACT 154 AND NON-RESIDENT WITHHOLDING (NRW) REVENUES

Projected annual Act 154 and NRW revenues, \$M



5.1.3 Medicaid Federal funding

In the steady state, Medicaid costs are typically funded primarily by the Commonwealth, as there is a cap on available Federal funding. Yearly Federal funding streams for the Commonwealth are the following, projected based on current law and statutory growth rates:

- **Standard annual Federal Medicaid funding.** Although Puerto Rico has a 55% Federal matching assistance percentage (FMAP), this amount is capped each year at an amount that is below 10% of costs. As of FY2018, this funding stream was capped at \$359.2 million, and though the cap grows each year, it does not keep pace with healthcare expenditure growth.¹⁹
- **Children's Health Insurance Program (CHIP) funding.** CHIP funding is not subject to a Federal cap. It also has a higher FMAP at 91.5%, though this Federal cost share is projected to decrease in FY2020 with the expiration of the Affordable Care Act's temporary increase. In FY2018, this amount totaled \$172 million.
- Each year, funds are **passed directly through to the Department of Health**, totaling \$200 million out of the annual Federal funds available for Medicaid. This funds Federally Qualified Health Centers (Centros 330, "FQHC") and Medicaid Operations.

In FY2018, however, the available share of Federal funds is much higher due to several Federal fund sources. Additional Federal funding is provided in FY2018 by **remaining Affordable Care Act (ACA) block grant** funds (approximately \$598 million as of the beginning of the fiscal year) and supplemental FY2017 Omnibus Federal funding of \$296 million.

¹⁹ According to the Social Security Act, the cap grows by the medical component of CPI-U as reported by BLS each year. From FY2011-FY2016, this growth averaged 2.9%. This inflation rate differs from the healthcare inflation index for Medicaid and Medicare used elsewhere in this New Fiscal Plan (7.1% from FY2018-FY2023, and 5.6-4.7% in the long-term). Instead, the medical component of CPI-U includes other factors that lower the inflation rate by approximately 3-5 percentage-points, meaning the increase in the Federal funding cap will not keep up with actual increases in expenditures

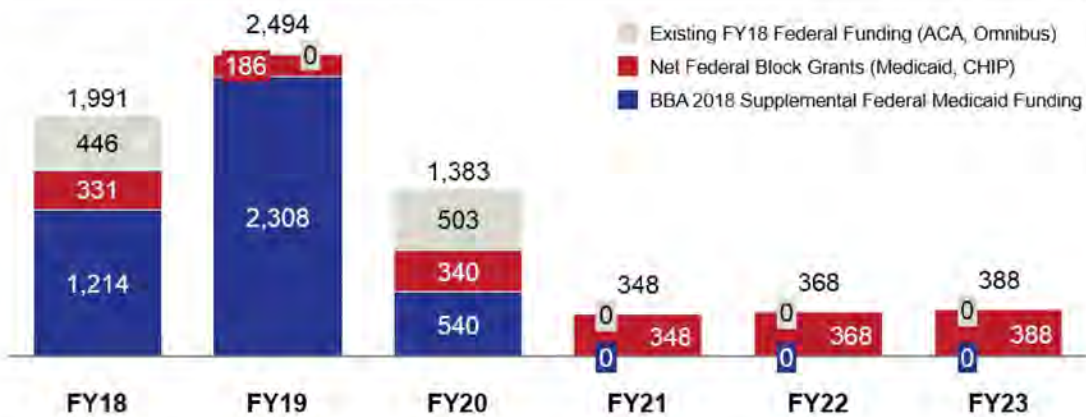
In addition, in February 2018 the Bipartisan Budget Act of 2018 (BBA) allocated a supplemental \$4.8 billion of Federal funding to Puerto Rico Medicaid, for use between January 2018 and September 2019. Per CMS guidance, this funding is estimated to apply only as a reimbursement for eligible populations (i.e., Federally funded Medicaid expenses). The Puerto Rico Health Insurance Administration (ASES) will spend as much of the allocation as possible before drawing down any remaining ACA funds, which can resume use from September 30, 2019 until expiration in December 31, 2019.

Depending on the exact parameters of eligible spending (e.g., if Commonwealth-funded populations and/or some dual-eligible CHIP members are eligible), ASES will be able to absorb between \$4.1 billion and \$4.8 billion of the allocated funding for core Medicaid expenditures.²⁰ It will continue to receive its annual CHIP,²¹ FQHC, and DOH Medicaid operations funding.

Exhibit 15 outlines expected Medicaid Federal fund receipts. Starting in FY2020, Supplemental funding is projected to phase out. This funding cliff indicates the imperative and urgent need to implement cost-saving measures to reduce long-term Medicaid costs (Medicaid expenditures are discussed in detail in *Section 5.2.2*).

EXHIBIT 15: MEDICAID EXPECTED FEDERAL FUND RECEIPTS

Medicaid Federal funding sources, \$M



5.1.4 Other Federal Funding

In addition to Medicaid funding, Puerto Rico receives other federal funds, which cover both social benefits and operational expenditures. In the New Fiscal Plan, these funds have been modeled based on what types of costs they cover (e.g., benefits or operations) as well as the statutory formula that defines the size of Puerto Rico's allotment. For example, while TANF funds are typically pass-through (e.g., none of these funds go to operational costs), some Title I education funds are used for operational purposes (e.g., teachers' salaries, school supplies for programs for students with special needs, etc.). For the former, federal fund inflows and outflows mirror each other (as benefit needs decline, so do funds). For the latter, though

²⁰ Current assumption is that only Federally funded Medicaid beneficiaries (excluding all CHIP and Commonwealth members) are eligible for reimbursement using BBA funds. These beneficiaries represent approximately 80% of total MCO disbursements, 100% of Platino premiums, all administrative costs, and less any cost-saving measures (described in Chapter 14) that reduce reimbursable spend during the timeframe

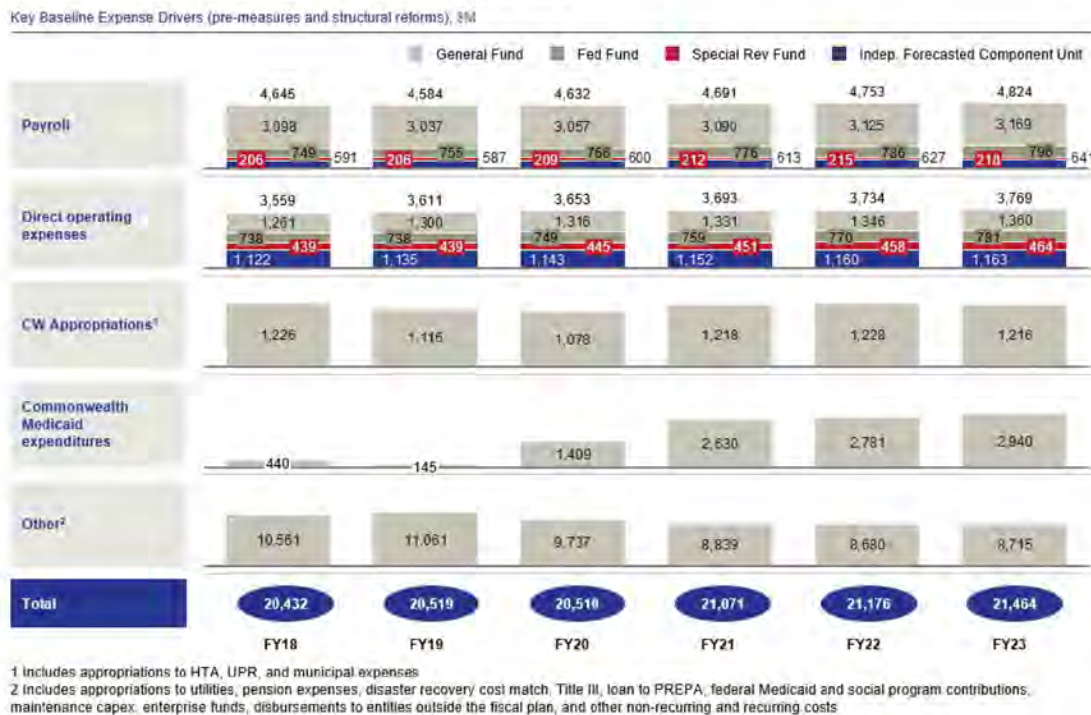
²¹ CHIP funding will continue at 91.5% FMAP until expiration of the ACA enhanced FMAP in September 2019. At that point, FMAP will return to 68.5% pre-ACA level, according to §2101(a) of the Affordable Care Act which amended §2105(b) of the Social Security Act

inflows may decline, it does not necessarily mean expenditures decline as well – as expenditures are based on operations, not on benefits formulas. Meanwhile, while Head Start funds are allocated from the federal government based on the number of children living in poverty, PAN funds are provided through a block grant that is capped. The former, therefore, should change by population, while the latter should be consistent regardless of population size.

5.2 Baseline expenditure forecast

Over the next five years, baseline expenditures are set to increase over FY2018 due to inflation and increases in Medicaid and pensions costs (**Exhibit 16**).

EXHIBIT 16: MAJOR EXPENDITURE CATEGORIES



5.2.1 Payroll expenses and non-payroll operating expenditures

Payroll expenses: The expenditure model holds payroll constant at the FY2018 approved budget levels based on the Fiscal Plan Compliance Act. Payroll projections do not assume reductions from either attrition or absenteeism, as reductions would need to be met with limits on rehiring to truly capture any cost savings – therefore, any workforce reductions will be captured only through fiscal measures. Further, whereas the March 2017 Fiscal Plan included a payroll freeze through FY2019 (which is reflected in the baseline), the extension of this payroll freeze is proposed by the New Fiscal Plan and will therefore be counted as a measure. After FY2019, all figures are projected to grow by Puerto Rican inflation.

Non-Personnel Operating Expenses: Like payroll expenses, non-personnel operating expenses are projected to be frozen FY2018-FY2019 by the March 2017 Fiscal Plan measures, with costs growing by inflation thereafter. Utility costs are based on the historical cost of government payments for utilities-related costs.

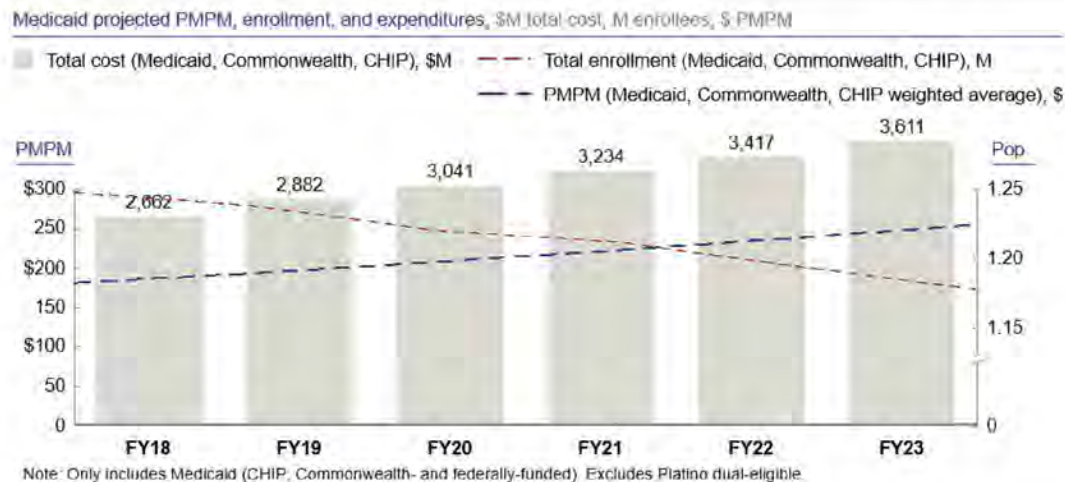
5.2.2 Medicaid costs

Medicaid costs are projected to reach over \$3.6 billion annually by FY2023 (**Exhibit 17**). These costs are primarily driven by the cost per member per month (PMPM) and the number of people enrolled in Medicaid (Federal and Commonwealth), CHIP, and Platino dual eligible programs. Other categories also contribute, including health-related expenses (e.g., HIV and Pulmonary programs) and program administration, bringing total expenditures to \$3.7 billion by FY2023.

In the short term, Hurricane Maria is expected to affect both PMPM and enrollment, as evidenced by historical post-disaster environments. From August (pre-Maria) to March 2018, actual enrollment data has indicated nearly a 5% increase in enrollment, as residents face higher rates of utilization and struggle to fulfill basic needs. Other post-disaster areas have exhibited a similar spike in proportion of population enrolled in Medicaid but have shown that enrollment soon declines back to trend.²² Similarly, the proportion of Puerto Ricans enrolled in Medicaid is expected to slightly drop after a time. As the overall population of Puerto Rico decreases, the Mi Salud population will decline concurrently, but will likely lag overall outmigration trends by a year due to the time needed for individuals to switch to a new plan once they have left the Island.

PMPM costs are projected to grow at 7.1% annually. This rate combines normal healthcare cost inflation rate of 6.0% experienced in Puerto Rico before the storm,²³ along with an additional 1.1% observed in other post-disaster environments.²⁴

EXHIBIT 17: PROJECTIONS FOR MI SALUD BASELINE PMPM AND ENROLLMENT (NOT INCLUDING PLATINO)



²² Analysis included effect of Hurricane Katrina on Medicaid population in New Orleans. Directly following the storm, the proportion of overall population on Medicaid spiked, but declined beginning a year after the hurricane. Source Louisiana Department of Health and Hospitals, Bureau of Health Services Financing. "Louisiana Medicaid Annual Report," 2005-2009, <http://dhh.louisiana.gov/index.cfm/newsroom/detail/1699/>

²³ From 2011-2016, the CAGR for PMPM inflation in Puerto Rico averaged about 6.6% (ASES analysis of historical PMPM rates). Milliman actuarial analysis projects a 5-7% PMPM inflation rate from FY2018-FY2020 and 4-6% PMPM inflation rate from 4-6%

²⁴ NBER working paper 22272 analyzing fiscal effects of hurricanes on healthcare costs. Table 7, Panel B coefficient for implied effect after 7.5 years spread year over year; Took the value of the implied effect after 7.5 years (0.085); Divided this by the number of years (7.5); Provided the change year over year = $0.085/7.5 = 0.0113$; Then, interpreted the coefficient; Given the y variable is logged, the interpretation is: (change year over year) * (100%) = % change year over year, generating a 1.13% change projected year over year. Deryugina, Tatyana. "The Fiscal Cost of Hurricanes: Disaster Aid Versus Social Insurance." National Bureau of Economic Research, May 2016

Other costs, which include HIV/PDP, Health Insurance Provider Fee, Air Ambulance, MC21 Administrative Fee, Super Utilizers, and Pulmonary, among others, are projected to grow at the rate of Puerto Rico inflation.

Expenditures for the Platino dual eligible program were estimated using a consistent \$10 PMPM over FY2018-FY2023, representing payment for wrap-around services supplementing main Medicare coverage. Enrollment is projected to be affected similarly to Medicaid enrollment, though with less fluctuation in actual proportion of population enrolled.²⁵ Platino costs are expected to total \$29 million in FY2018 and decline slightly to \$28 million by FY2023.

5.2.3 Other costs

Appropriations: Baseline municipal appropriations are projected to remain constant at ~\$220 million from FY2018-FY2023, with the exception of a *one-time* allotment to municipalities as a result of Hurricanes Irma and Maria, which is to be provided in FY2018 for the amount of \$78 million, and which will be allocated on the same basis as the existing municipality subsidies. The University of Puerto Rico appropriation baseline is \$708 million in FY2018 and remains ~\$717 million from FY2019-FY2023.

Pension costs: Projections rely on demographic estimations for Employees' Retirement System (ERS), Teachers' Retirement System (TRS), and Judicial Retirement System (JRS) populations and benefit obligations, and include updated data and actuarial projections for regular TRS and JRS benefits (extrapolated to update estimates for ERS). From FY2018-FY2023, costs are projected to grow slowly but remain approximately \$2.3 billion for the New Fiscal Plan period.²⁶ Starting in FY2018 ERS pension benefits have been paid on a pay-as-you-go basis, given that the majority of the liquid assets in the retirement system have been depleted.

Capital expenditures: Centrally funded maintenance and capital expenditures of the Commonwealth (excluding PREPA, PRASA, HTA self-funded capex/one-time transfers) is expected to be \$400 million annually. Of this, \$124 million will be appropriated to HTA and UPR, with the remaining \$276 million for use by the Commonwealth. The capital expenditure costs are lower in the short-term because of the large disaster relief funding allocations from the Federal Government and from Puerto Rican cost match. HTA's capital expenditure funds will be used to support reconstruction, maintenance, traffic reduction, completion of the strategic network, and P3-related expenditures. UPR's capital expenditure funds will support, among other projects, Phase III of the large Molecular Sciences building, building restoration at Rio Piedras, and the development of a major campus building at Mayagüez.

Independently Forecasted Component Units (IFCUs): IFCUs in the New Fiscal Plan include Puerto Rico Industrial Development Company, Public Buildings Authority, Ports Authority, State Insurance Fund Corporation, Medical Services Administration, Tourism Company, Health Insurance Administration, Cardiovascular Center, Housing Finance Authority, Department of Agriculture, Integrated Transport Authority, AAFAF, and Convention Center Authority. From FY2018-FY2023, IFCU payroll expenditures are projected to be ~\$600 million annually. Non-payroll operating expenditures are projected to remain at ~\$1.1 billion annually.

Cost share of disaster relief funding: Federal funds for public assistance typically require a local match from the entity receiving them (anywhere from 10-25% of funds). In the case of

²⁵ Projected based on a smaller observed spike in actual enrollment from pre- to post-Maria relative to Medicaid spike

²⁶ Projections for pension expenses are provided by Pension Trustee Advisors (PTA) calculations

Puerto Rico, the New Fiscal Plan projects that the Commonwealth will need to cover an estimated 10% of Federal public assistance funds, amounting to \$1.1 billion from FY2018-FY2023. However, a certain portion of this is expected to be covered by CDBG funds (e.g., 25% of the initial \$1.5 billion allocated from HUD in February, which would amount to ~\$188 million from FY2018-FY2023, or \$375 million over the 10 years of federal fund receipts). Thus, total cost share incurred by the Commonwealth is expected to be \$870 million from FY2018-FY2023.

PROMESA related costs: Commonwealth PROMESA related expenses are projected to be \$1.5 billion for FY2018 to FY2023, comprised of professional fees (approximately \$1.1 billion over six years) and funding for the Oversight Board (\$430 million over six years). The estimate for professional fees was developed, in conjunction with the Government, by analyzing FY2018 run-rate billings based on available information and soliciting input from certain professionals. Fees were benchmarked versus comparable restructuring situations that yield an average professional-fee-to-funded-debt ratio of 1.89% relative to 1.65% projected for the Commonwealth (**Exhibit 18**).

EXHIBIT 18: PROJECTED PROFESSIONAL FEES RELATIVE TO OTHER MAJOR RESTRUCTURINGS

	Date filed	Outstanding debt, USD	Total fees and expenses, USD	Fees to funded debt, %	
City of Detroit, Michigan	Jul. 2013	\$20,000,000,000	\$177,910,000	0.89%	<div>Summary Statistics</div> <div> Avg. 1.89% Max 3.56% Min 0.16% Med 1.68% </div>
Residential Capital, LLC	May-12	\$15,000,000,000	\$409,321,308	2.73%	
Sabine Oil & Gas Corp.	Jul. 2015	\$2,800,000,000	\$78,553,223	2.81%	
Caesars Entertainment Operating Company	Jan. 2015	\$18,000,000,000	\$258,278,005	1.43%	
Lehman Brothers Holdings Inc.	Sep. 2008	\$613,000,000,000	\$956,957,469	0.16%	
Lyondell Chemical Company	Jan. 2009	\$22,000,000,000	\$205,932,292	0.94%	
American Airlines	Nov. 2011	\$11,000,000,000	\$391,637,858	3.56%	
Washington Mutual, Inc.	Sep. 2008	\$8,000,000,000	\$271,085,213	3.39%	
Edison Mission Energy	Dec. 2012	\$5,000,000,000	\$96,244,628	1.92%	
Energy Future Holdings Corp.	Apr. 2014	\$40,000,000,000	\$450,110,233	1.13%	
Puerto Rico	2017	\$64,000,000,000	\$1,057,990,545	1.65%	



Puerto Rico involves added complexity as the largest public sector restructuring in the history of the United States

Emergency reserve: The Commonwealth must establish an emergency reserve of \$1.3 billion, or ~2.0% of FY2018 GNP, by reserving \$130 million per year for 10 years. The methodology supporting this reserve is informed by guidance provided to The Bahamas, another Caribbean island, by the International Monetary Fund in defining an adequate emergency reserve (2-4% of GNP, accumulated at 1/2% per year).²⁷ Restrictions on the use of this fund must ensure that it is a true emergency reserve.

²⁷ IMF Bahamas Article IV report published March 22, 2018

Chapter 6. LONG-TERM PROJECTIONS AND DEBT SUSTAINABILITY ANALYSIS (DSA)

While the New Fiscal Plan emphasizes the period from FY2018-FY2023, the Plan's core goal is to put Puerto Rico on a path towards long-term fiscal balance. The Government's existing bonded debt also is long-term, with final maturities on some credits extending out 40 years from today to FY2058. Accordingly, long-term projections are an important component in evaluating the Fiscal Plan's implementation and in the resulting Debt Sustainability Analysis (DSA).

6.1 Macroeconomic, revenue and expenditure projections

Most macroeconomic trends are forecast to continue their current trajectories through the next 40 years, and slowly revert toward the pre-hurricane trend line as the impact of the hurricane and the disaster relief funding begin to wane. Population for example, is influenced by GNP, death and birth rates, and net migration, with the latter having the most significant impact. Population is estimated to steadily decline at a rate of 1.2-1.3% from 2024 onwards. Meanwhile, real growth reaches a trend of 0.2% by FY2048 after fiscal measures, aid, and structural reforms. Inflation on the other hand, settles at a run-rate of 1.94% as it is expected to converge to mainland forecasts.

Most revenues are projected to grow with nominal GNP in the long term²⁸. This includes SUT, Corporate Income Tax, Personal Income Tax, Non-Resident Withholding not paid by Act 154 entities and most General Fund revenues. Exceptions include:

- **Alcoholic beverages and cigarette-related tax** revenues, which are expected to grow by inflation and population. This assumption is supported both by relatively constant alcohol consumption in growing economies along with long-term decline in cigarette consumption both in Puerto Rico and in the U.S. mainland.
- **Rum excise on off-shore shipments**, is expected to grow by mainland population and is partially driven by the statutory waterfall by which rum excise taxes are paid into the general fund.
- **Non-Resident Withholding (NRW) and Act 154 revenues**, which will face further decline due to additional patent expiry risk and US tax ruling related risks. This risk is reflected in a \$100 million per year annual step-down beginning in FY2028 through FY2031 in Act 154 revenues as patent expiry is anticipated to accelerate in this period. NRW payments made by Act 154 payers are projected to follow this same trajectory. Both remain flat at ~35% and ~60% of their FY2018 levels, respectively, after this "step-down" period ends in FY2031.

Federal funds behave differently and grow based on historical and statutory appropriations. **Medicaid** is the most significant form of Federal funding and standard Medicaid matching funds grow by the medical services component of CPI-U, CHIP funding grows proportional to CHIP cost growth, Municipal intra-governmental transfers remain constant, and prescription drug rebates grows proportional to healthcare costs and population.

Just as most revenues grow by GNP, **payroll, non-payroll operating expenditures and utilities all grow by standard inflation**,²⁹ as do baseline appropriations after FY2023. Meanwhile, **capital expenditures** are anticipated to rise to 1.9% of GNP by FY2034, as

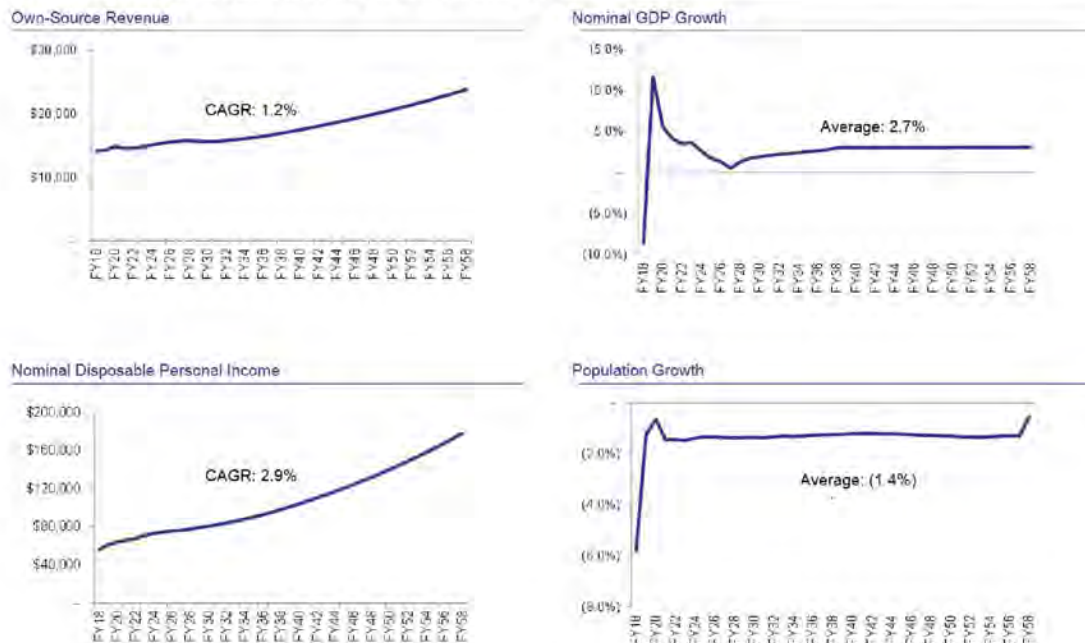
²⁸ This methodology is consistent with general IMF forecasting approaches and is intended to capture the overall change in consumption, investment and production within the economy

²⁹ Due to constraints on adding additional costs beyond inflation-related adjustments

Puerto Rico must sustain a higher level of maintenance and rely on its own funding for capital investments (rather than disaster relief funding). **Medicaid premiums** also grow at a faster pace than standard inflation, and instead grow by healthcare inflation (linear decline to 4.6% in long term) and population growth. Non-premium costs, such as administrative and “other” Medicaid costs grow by standard inflation in the long-term.

The long-term macroeconomic projections show trends for the key metrics shown below (**Exhibit 19**).

EXHIBIT 19: 40 YEAR FINANCIAL PROJECTIONS



Without sustained fiscal measures and aggressive structural reforms, there would be a significant deficit over 30 years. However, expenditure measures are set to increase with inflation (and healthcare with long-term health inflation), while revenues are expected to grow with GNP – thus, both help reduce the deficit (**Exhibit 20**).

EXHIBIT 20: PROJECTED LONG-TERM SURPLUS / DEFICIT

Financial Projection Detail, units as labeled

Projection	FY23	FY30	FY35	FY40	FY45	FY50	FY55	FY58
Population, #	2,951	2,681	2,508	2,355	2,216	2,077	1,942	1,867
Population growth rate, %	-1.48%	-1.36%	-1.30%	-1.21%	-1.23%	-1.31%	-1.31%	-1.25%
Inflation, %	1.4%	1.50%	1.50%	1.90%	1.90%	1.90%	1.90%	1.90%
Baseline real GNP growth, %	0.09%	2.26%	-1.55%	-1.26%	-1.25%	1.24%	-1.22%	-1.21%
Disaster funding, \$M	4,953	0	0	0	0	0	0	0
Revenues, pre-measures, \$M	19,332	19,433	19,676	20,585	21,740	23,001	24,384	25,288
Own revenues	14,312	13,925	13,758	14,138	14,671	15,249	15,880	16,293
Federal transfers	5,508	5,917	6,447	7,069	7,752	5019 59054	5,020	8,504
Expenditures, pre-measures, \$M	(21,464)	(23,784)	(26,118)	(28,623)	(31,530)	(34,559)	(38,073)	(40,448)
Own expenditures (excl. all Medicaid)	(14,813)	(15,659)	(16,761)	(17,838)	(19,090)	(20,237)	(21,627)	(22,574)
Social programs (incl. all Medicaid ¹)	(6,651)	(8,147)	(9,394)	(10,839)	(12,511)	(14,416)	(16,565)	(18,012)
Baseline gap / Surplus, \$M	(2,132)	(4,351)	(6,442)	(8,038)	(9,790)	(11,558)	(13,688)	(15,161)
Revenue Measures, \$M	624	682	755	839	937	533	599	1,003
Expenditure measures, ² \$M	4,128	4,691	5,241	5,811	6,370	2,944	3,574	6,737
Gap/surplus (post-measures/SRs), \$M	1,344	961	48	(209)	(522)	(699)	(1,095)	(1,407)
Contractual debt service payments ³	(2,669)	(3,087)	(3,091)	(2,799)	(1,525)	(1,412)	(1,400)	(236)
Net gap / surplus, \$M	(1,336)	(2,125)	(3,043)	(3,008)	(2,046)	(2,110)	(2,495)	(1,643)
Post measures real GNP growth, %	1.4%	-0.6%	-0.2%	0.1%	0.1%	0.2%	0.3%	0.3%
GNP (post-measures/SRs nominal)	75,000	83,721	88,687	97,122	107,476	119,292	132,829	141,898
GNP per capita (constant 2017 dollars, \$)	25,415	31,227	35,365	41,235	48,512	57,433	68,394	75,994
GNP per capita growth YOY (constant 2017 \$, %)	4.4%	2.3%	2.7%	3.3%	3.3%	3.5%	3.6%	3.6%

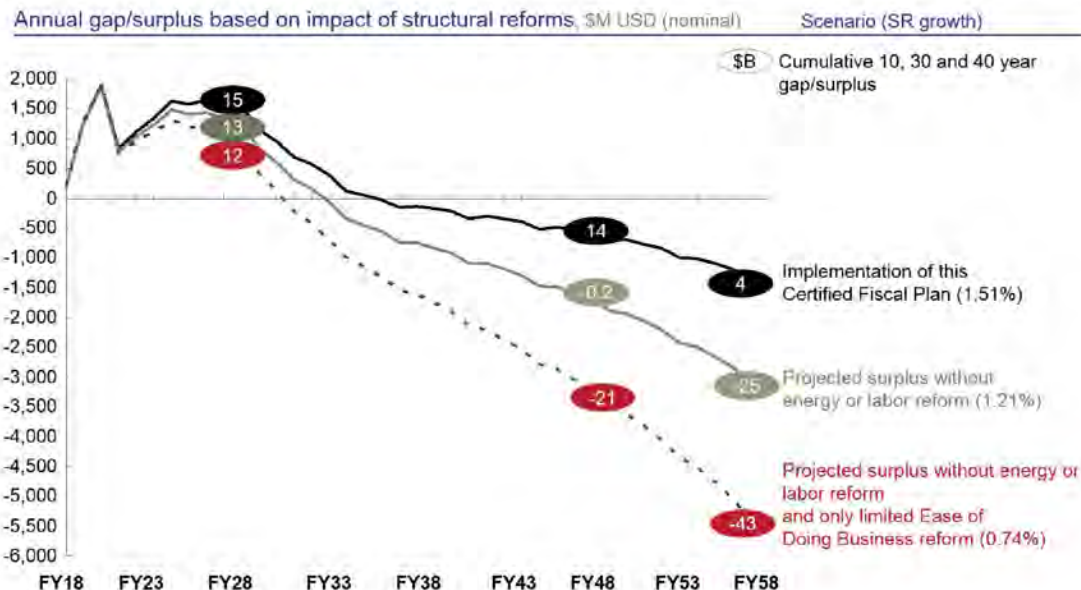
1 Includes CW-funded, Federally funded and SRF Medicaid as well as social programs

2 Includes implementation costs, e.g., EITC

3 Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt. Includes GO, PBA, COFINA Sr and Sub, CCDA, PRIFA, PFC, ERS, PRIDCO. The New Fiscal Plan does not assume any predetermined outcome of ongoing litigation with respect to GO and COFINA bonds

Meanwhile, the cumulative impact of structural reforms in the next 40 years drives over \$100 billion, thereby generating much of the future surplus. Even with structural reforms, a deficit will emerge in 2036 in part due to the absence of comprehensive human capital and welfare reform (**Exhibit 21**).

EXHIBIT 21: ANNUAL GAP/SURPLUS BASED ON IMPACT OF STRUCTURAL REFORMS

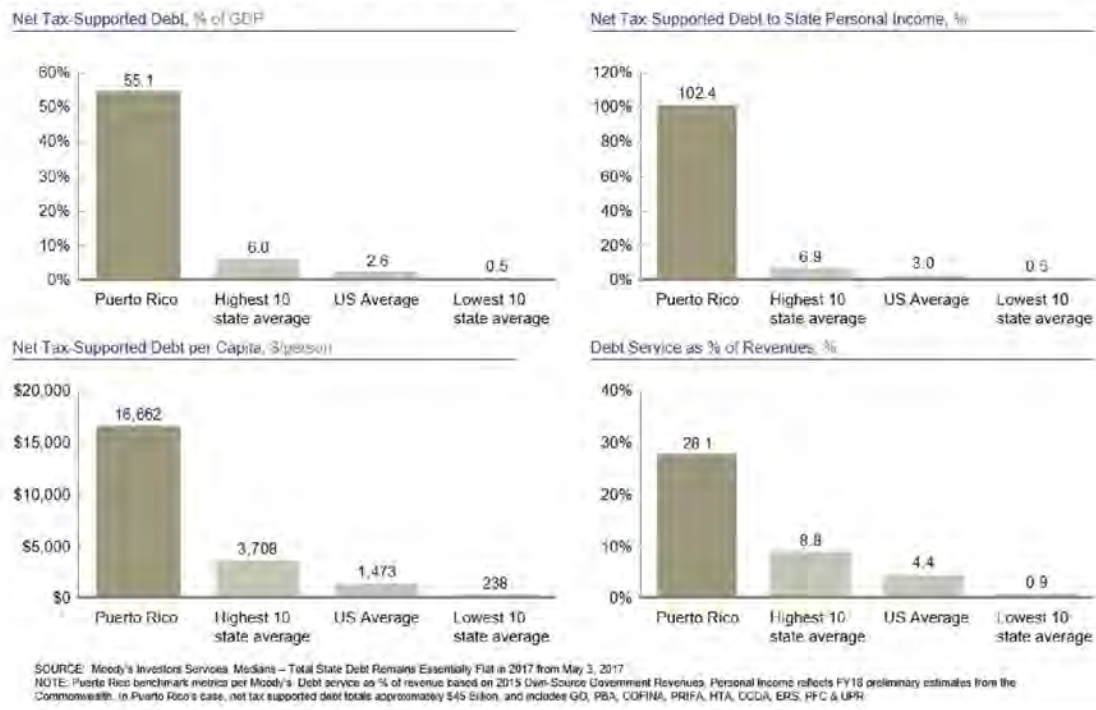


6.2 Debt Sustainability Analysis (DSA)

The DSA is intended to provide a framework for assessing the long-term capacity of the Government to pay debt service on its bonded debt. Debt levels post-restructuring need to be sustainable over the long-term and consistent with both a minimal risk of default on the restructured debt and a recovery of market access for future new money capital borrowings for ongoing infrastructure investment. The analysis begins with the selection of the most appropriate peer group against which to benchmark Puerto Rico. The DSA then applies rating agency metrics for that benchmark group to Puerto Rico to arrive at an assessment of what debt levels are sustainable in light of the long-term projections and the peer metrics. Net Tax-Supported debt is defined as debt payable from statewide taxes and other general resources, net of obligations that are self-supporting from pledged sources other than state taxes or operating resources (such as utility or local government revenues). Puerto Rico has approximately \$45 billion of Net Tax-Supported debt and includes GO, PBA, COFINA, PRIFA, HTA, CCDA, ERS, PFC, and UPR.

U.S. States as peer comparables. For many reasons, U.S. states are the most appropriate comparison group to use in benchmarking sustainable debt levels for Puerto Rico. Like U.S. states, Puerto Rico does not control its own currency, has no access to IMF restructuring support programs or similar international sovereign relief funding packages, and traditionally has been reliant on access to the same long-term municipal bond market used by the U.S. states to finance their capital needs. Puerto Rico's bonds also are rated by the same rating agency analyst groups that assign ratings to U.S. states, not by foreign sovereign bond rating analysts. For these and other reasons, Puerto Rico has more similarities to U.S. states than to sovereign nations. By virtually any measure tracked by the rating agencies, Puerto Rico's existing debt levels are a clear outlier relative to these U.S. state peers (**Exhibit 22**).

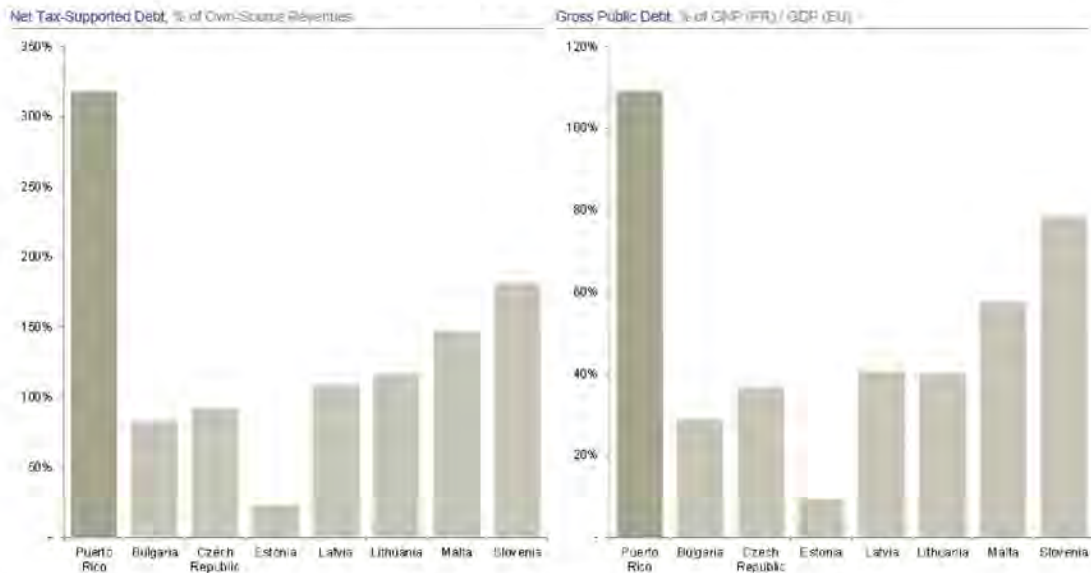
EXHIBIT 22: US STATES AS COMPARABLES



While some observers note that Puerto Rico residents do not pay Federal income taxes, they do pay Social Security and Medicare taxes, and the low per capita income levels would place most Puerto Ricans in a tax bracket where they would otherwise pay little or no Federal income tax anyhow. Meanwhile, Federal reimbursement levels provided to Puerto Rico for the largest Commonwealth spending programs (including Medicaid and transportation), are capped at levels well below the FMAP and Federal Highway reimbursement levels provided to comparably sized and wealthier states. Puerto Rico's residents pay graduated income taxes to Puerto Rico at brackets comparable to the Federal income tax rates, thereby providing funds needed to provide services to the Puerto Rico resident population, which is far poorer than the population of any U.S. state. Yet Puerto Rico receives less Federal support. The most recent U.S. Census Bureau estimate of per capita income in Puerto Rico was \$11,688,³⁰ 67.9% below the lowest U.S. state and 76.8% below average U.S. state 2017 per capita income.³¹

In general, foreign sovereigns are not the closest comparable to use in determining Puerto Rico's debt sustainability levels given the reasons described above; but of foreign sovereigns, smaller European Union countries offer the closest comparator. Like Puerto Rico, these E.U. nations also lack their own currency and monetary policy levers, although they can and do access IMF financial support. Puerto Rico's current debt levels are also an outlier when compared to these E.U. sovereigns (**Exhibit 23**).

EXHIBIT 23: EU SOVEREIGNS AS COMPARABLES



SOURCE: Puerto Rico data from Commonwealth sources and Board Economist, European Commission Debt Sustainability Monitor 2017 Institutional Paper 071, published January 2018 and data from the World Bank at <https://data.worldbank.org/>

Metrics for debt sustainability. Viewing U.S. states as the most comparable group for benchmarking Puerto Rico, the DSA uses the metrics in the May 2017 Moody's Investors Service report "U.S. State Government Debt Analysis" to develop a range of levels for sustainable debt capacity, including maximum annual debt service levels for Puerto Rico on its restructured existing debt. The key debt ratios for the ten lowest indebted states, the ten highest indebted states, and the mean for all U.S. states are shown below (**Exhibit 24**).

³⁰ U.S. Census Bureau 2016 Estimate

³¹ U.S. Bureau of Economic Analysis in the March 22, 2018 release

EXHIBIT 24: KEY DEBT RATIOS FOR TEN HIGHEST INDEBTED STATES

Net tax-supported debt, % of GDP		Net tax-supported debt to state personal income, %		Debt service, % of revenues		Net tax-supported debt per capita, \$	
Low 10	0.5%	Low 10	0.5%	Low 10	0.9%	Low 10	\$238
Mean	2.6%	Mean	3.0%	Mean	4.4%	Mean	\$1,473
Top 10	6.0%	Top 10	6.9%	Top 10	8.8%	Top 10	\$3,708
1 Connecticut	9.2%	1 Hawaii	10.5%	1 Connecticut	13.30%	1 Connecticut	\$6,505
2 Hawaii	8.9%	2 Massachusetts	9.8%	2 Massachusetts	10.40%	2 Massachusetts	\$5,983
3 Massachusetts	8.4%	3 Connecticut	9.7%	3 Hawaii	10.40%	3 Hawaii	\$5,018
4 New Jersey	6.9%	4 New Jersey	7.3%	4 New Jersey	10.10%	4 New Jersey	\$4,388
5 Mississippi	5.2%	5 Delaware	5.4%	5 Illinois	8.80%	5 New York	\$3,070
6 Kentucky	4.7%	6 Washington	5.4%	6 New York	7.40%	6 Washington	\$2,717
7 Washington	4.5%	7 Kentucky	5.3%	7 Kentucky	7.40%	7 Delaware	\$2,544
8 New York	4.2%	8 New York	5.3%	8 Washington	7.00%	8 Illinois	\$2,511
9 Illinois	4.1%	9 Mississippi	5.2%	9 Maryland	6.50%	9 California	\$2,217
10 Rhode Island	4.0%	10 Illinois	5.1%	10 Mississippi	6.30%	10 Rhode Island	\$2,131

SOURCE: Moody's investors services, medians – Total state debt remains essentially flat in 2017 from May 3, 2017

Exhibit 25 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the *average* U.S. state. The debt capacity ranges shown are based off the following four methodologies: (i) Debt to Own Source Revenues, (ii) Debt per Capita, (iii) Debt to State Personal Income and (iv) Debt to GDP. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and future debt issuance. The 5-year average capacity statistics represent the average par amount between the four methodologies of an implied 5%, 30-year level debt service structure.

EXHIBIT 25: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON AVERAGE U.S. STATE (\$M)

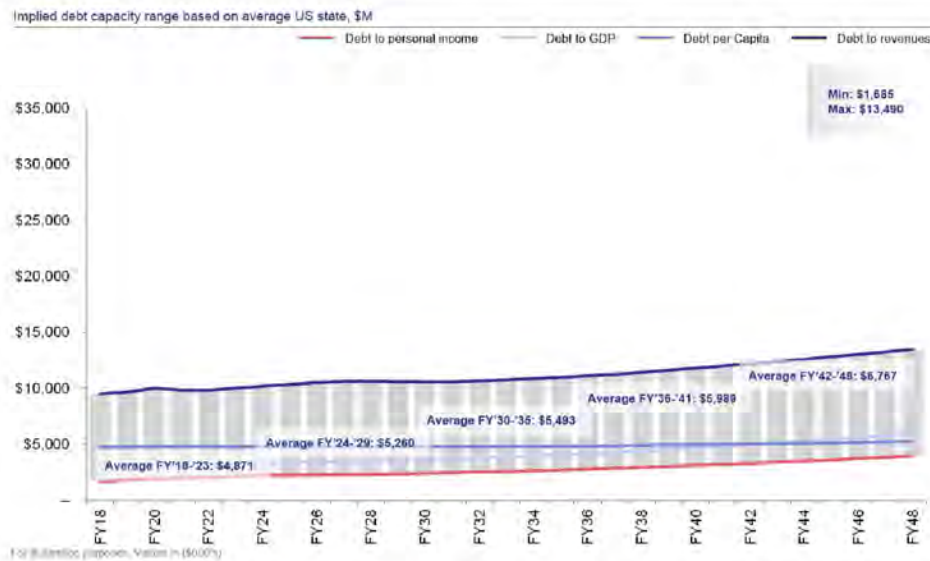
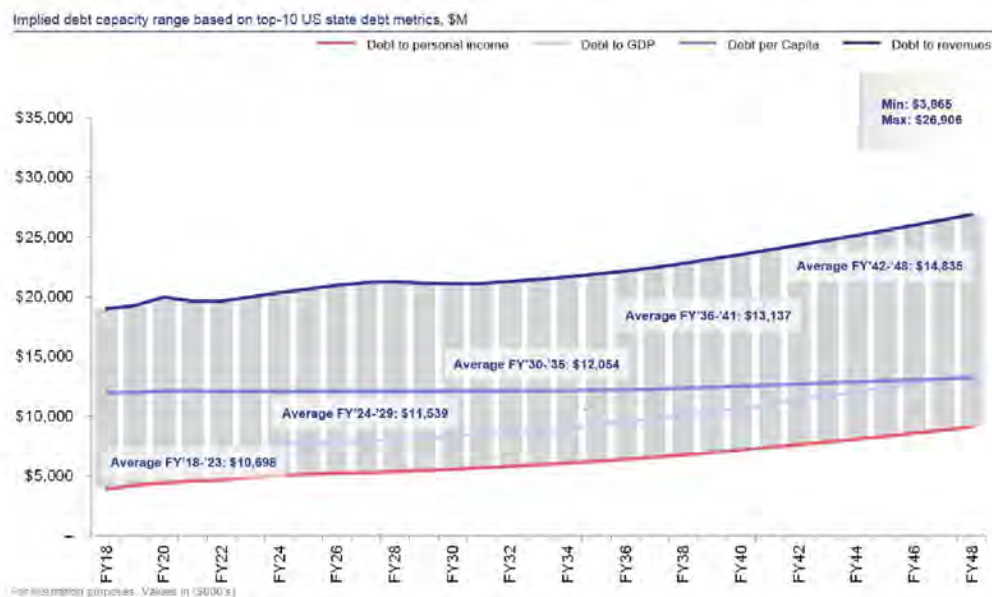


Exhibit 26 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the *10 highest indebted* U.S. states. The debt capacity ranges shown are based off the following four methodologies: (i) Debt Service to Own Source Revenues, (ii) Debt per Capita, (iii) Debt to State Personal Income and (iv) Debt to GDP. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and future debt issuance. The 5-year average capacity statistics represent the average par amount between the four methodologies of an implied 5%, 30-year level debt service structure.

EXHIBIT 26: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON TOP-10 U.S. STATE DEBT METRICS (\$M)



The illustrative implied levels of the Government's restructured debt in the previous chart are calculated by applying the Net Tax Supported Debt ratios of the "top ten" U.S. states (in terms of debt load) to Puerto Rico's future projected GDP, population and Own-Source Revenues. Debt Service to Own Source Revenue figures are derived assuming debt service of a long-term level debt service structure, with a 5% average coupon. It is important to note that Moody's has issued proposed new U.S. state rating criteria that update traditional "Debt Service Ratio" (Debt service/Own Source Revenues) to a "Fixed Costs/State Own Source Revenues" ratio that encompasses both debt and pension expense, a shift that makes the New Fiscal Plan's pension-related measures all the more important to see fully implemented.

Maximum annual debt service cap on restructured fixed payment debt. The implied debt capacity and expected growth in debt capacity must be sufficient to cover both the payments due on the restructured debt and all payments due on future new money borrowings. Accordingly, the aggregate debt service due on all fixed payment debt issued in the restructuring of the Government's existing tax-supported debt should be capped at a maximum annual debt service ("MADs") level. The cap would be derived from the U.S. state rating metrics, and specifically from what Moody's calls the "Debt Service Ratio." The Debt Service Ratio is the ratio of total payments due in a year on all existing net tax-supported debt over that state government's own-source revenues (i.e., excluding Federal transfer payments) in that year.

The Moody's report indicates that the average Debt Ratio for the all U.S. states is 4.4%. The Moody's report indicates that the average Debt Ratio for the top 10 most indebted states is 8.8%. To the extent either of these Debt Ratios is used to set a MADs cap on the restructured debt and the Primary Surplus is below the MADs level, then the debt service due on fixed payment debt would need to be set at the lower of the amount available for debt service or the MADs limit.

Any additional cash flow above the MADs cap applied to the restructured fixed payment debt that is generated over the long-term from successful implementation of the New Fiscal Plan could be dedicated to a combination of contingent "growth bond" payments to legacy bond creditors, debt service due on future new money borrowings needed to fund Puerto Rico's infrastructure investments and additional "PayGo" capital investment to reduce the Government's historically out-sized reliance on borrowing to fund its needs, among other purposes.

Debt sustainability analysis. Exhibit 27 below calculates implied debt capacity based on a range of interest rates and Fiscal Plan implementation risk factors under an assumed illustrative 30-year term and level debt service. The implementation risk factor is calculated by reducing the amount of projected cash flow available per year for debt service by a certain percentage. For example, a 20% implementation risk factor case would use only 80% of the projected cash flow available to pay debt service on fixed payment debt.

EXHIBIT 27: IMPLIED DEBT CAPACITY BASED ON RANGE OF INTEREST RATES AND IMPLEMENTATION RISK FACTORS (\$M)

Implied debt capacity based on range of interest rates and contingency, \$M

Illustrative Cash Flow Available		Sensitivity Analysis: Implied Debt Capacity at 20% Implementation Risk					
		\$400	\$600	\$800	\$1,000	\$1,200	\$1,400
Sensitivity Analysis: Varying PV Rates	4.0%	\$5,533	\$8,300	\$11,067	\$13,834	\$16,600	\$19,367
	5.0%	4,919	7,379	9,838	12,298	14,758	17,217
	6.0%	4,405	6,607	8,809	11,012	13,214	15,417

Illustrative Cash Flow Available		Sensitivity Analysis: Implied Debt Capacity at 5% PV Rate					
		\$400	\$600	\$800	\$1,000	\$1,200	\$1,400
Sensitivity Analysis: Varying Implementation Risk	10.0%	\$5,534	\$8,301	\$11,068	\$13,835	\$16,602	\$19,369
	20.0%	4,919	7,379	9,838	12,298	14,758	17,217
	30.0%	4,304	6,456	8,609	10,761	12,913	15,065

Restoration of cost effective market access. Ultimately, the Government must develop and adhere to structurally balanced budgets reflecting ongoing fiscal discipline, timely publication of audited financial statements and related disclosure information; it must restructure its current excessive debt load to a sustainable level. As Puerto Rico seeks to regain cost-effective capital markets access, rating analysts and investors will demand that the Commonwealth demonstrate improvement in all four core areas of creditworthiness identified by Moody's: the economy, government finances, governance and "fixed cost" debt and pension expenses. Together, these and other measures outlined in the New Fiscal Plan can chart a path to restoring Puerto Rico's market access.

PART III: Restoring growth to the Island

A sustainable fiscal and economic turnaround depends entirely on comprehensive structural reforms to the economy of Puerto Rico. Only such reforms can drive growth in the economy, reversing the negative trend growth over the last 10 years and enabling the Island to become a vibrant and productive economy going forward. To reverse the negative economic trends, the Government must pursue reforms in the following areas:

Human capital and welfare reforms will improve job creation, workforce participation, and the well-being and self-sufficiency of welfare recipients, , resulting in a cumulative GNP impact of 0.30% by FY2023. The impact is enhanced in the long-term as K-12 education reforms begin adding an additional 0.01% GNP impact per year, resulting in an additional 0.16% uptick by FY2048 that continues growing in outer years (to 0.28% by FY2060).

Ease of doing business reforms will improve conditions for economic activity and job creation, trading across borders, employment opportunities, and business vitality, resulting in a cumulative GNP impact of 0.65% by FY2023.

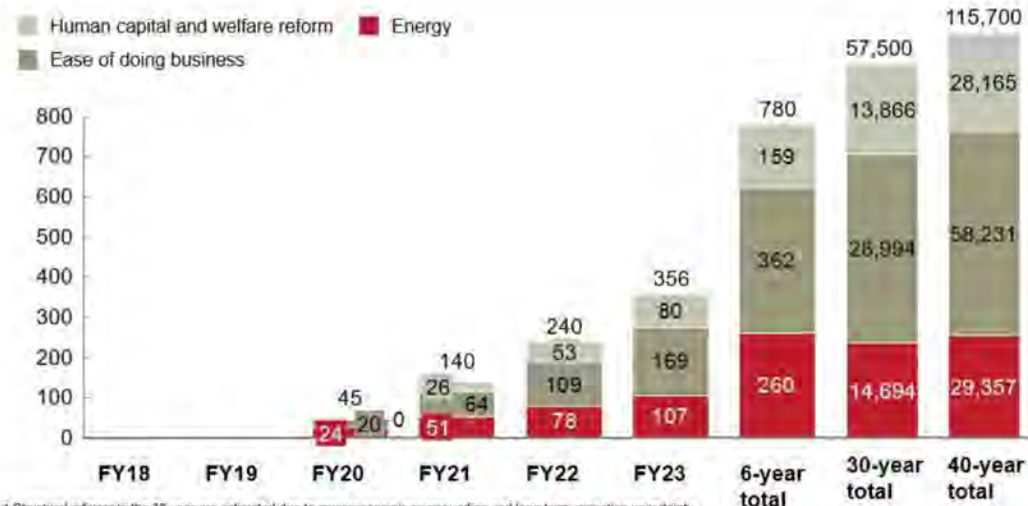
Power sector reforms will improve availability and affordability of energy for families and businesses, resulting in 0.30% cumulative GNP impact by FY2023.

Infrastructure reform and capital investment will improve the flow of goods, services, information, and people across the Island. It has not been scored to provide a specific GNP uptick, yet undoubtedly contributes a consequential uptick in the Island's long-term development.

If implemented immediately, the structural reforms are projected to result in a sustained 1.25% annual real GNP growth by FY2023. As shown below (**Exhibit 28**), these reforms equal approximately \$50 billion in increased Commonwealth revenues over 30 years (and over \$100 billion over 40 years). In the long term, **education reforms are projected to add an additional cumulative 0.26% to GNP growth, making total impact 1.41% by FY2048 and 1.51% by FY2058.** The reforms are crucial to placing Puerto Rico on a path to long-term structural sustainability.

EXHIBIT 28: IMPACT OF STRUCTURAL REFORMS OVER 30 YEARS

Impact of structural reforms, \$M



Chapter 7. HUMAN CAPITAL & WELFARE REFORM

7.1 Current state of human capital and welfare laws

Puerto Rico faces immense challenges with formal labor force participation and preparedness. The Island's formal labor force participation rate is only ~40%, far from the U.S. mainland average (63%) or even the lowest-ranked U.S. state (West Virginia, 53%), and well below other Caribbean islands. In fact, according to World Bank data, Puerto Rico's formal labor force participation rate is currently 7th lowest in the world and has never ranked higher than the bottom 20.³² Puerto Rico's youth unemployment rate is 23.8%, almost double the world average (13.8%) and more than double the U.S. average (10%).³³ Low labor force participation in Puerto Rico is a function of neither Hurricane Maria nor the economic downturn that began in 2006; rather, low rates of employment are a long-term structural problem that can be addressed only through significant changes to public policy.

Unless Puerto Rico substantially increases its labor force participation and employment, incomes will always fall far below mainland states and outmigration will continue to draw Puerto Ricans away from the island of their birth. However, Puerto Rico could improve labor market flexibility through repealing restrictive laws like Law 80 and creating labor conditions more similar to those on the mainland, which would lead to increased labor force participation rates. If Puerto Rico's labor force participation rate grew to match even to that of the lowest U.S. state, incomes would rise, poverty would decline, and the budgetary deficit would improve. **While many other reforms are important to making these improvements, increasing labor force participation may be the single most important reform for long-term economic well-being in Puerto Rico.**

³² Puerto Rico ranking has never surpassed 215th out of the 232 countries, states, and territories tracked by The World Bank Group since The World Bank Group began collecting data in 1990

³³ The World Bank Group, 2017, via International Labour Organization, ILOSTAT database. Data retrieved in March 2017. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>

7.1.1 Labor laws

Puerto Rico's historically low levels of formal labor force participation cannot be attributed to any single factor, but a range of public policies have served to reduce employment on the Island.

Perhaps the biggest barrier to hiring in Puerto Rico is its lack of "at-will employment," which would make it easier for employers to dismiss unsatisfactory employees. While there are variations in labor laws among the 50 mainland states, 49 of them adopt some form of at-will employment. In Puerto Rico, Law 80 was passed in 1976 requiring employers to first prove "just cause" before dismissing employees. Law 80's "just cause" requirement applies to any employees hired for an indeterminate period of time, as well as any employee with a tenure longer than twelve months. In addition, Law 80 mandates significant severance pay: 3 months' base wages, plus two weeks' additional wages for every year of the outgoing employee's tenure. The need to establish just cause can be costly for employers because it typically leads to litigation, and many employers simply pay severance pay to an unsatisfactory employee to avoid a court dispute. Labor flexibility-reducing legislation like Law 80 can also have the additional effect of skewing investment to capital rather than labor, reducing the positive impact of any surplus on the labor market.

While some employees benefit from Puerto Rico's lack of at-will employment, this policy makes it more costly and risky not only to dismiss, but also to hire, an employee. There is evidence that such job protections lower employment opportunities. For example, studies have found that laws preventing unfair dismissal caused reductions in employment, particularly in labor-intensive industries;³⁴ and in U.S. states, a recent study found that expanding unfair dismissal protections caused employers to shift away from using less-skilled workers and toward greater use of capital investments and more-skilled labor. When Colombia reduced the cost of dismissing workers, unemployment fell and the size of the informal labor force declined.³⁵ In a 2003 book on labor laws in Latin America and the Caribbean, Nobel Prize-winning economist James Heckman concluded that

"mandated benefits reduce employment and... job security regulations have a substantial impact on the distribution of employment and on turnover rates. The most adverse impact of regulation is on youth, marginal workers, and unskilled workers. Insiders and entrenched workers gain from regulation but outsiders suffer. As a consequence, job security regulations promote inequality among demographic groups."

The Government has recently made strides to improve labor market conditions with the Labor and Flexibility Act (Act 4-2017) in January 2017, which added flexibility to overtime regulations and increased work requirements to become eligible for Christmas Bonus and severance pay, among other reforms. However, the Island still is not an employment at-will jurisdiction, imposing costs and regulatory burdens that reduce employment, wages and economic opportunity.

³⁴ RAND Corporation, 1992

³⁵ Kugler (2004). See Dertouzos, James N., and Lynn A. Karoly. "Labor market responses to employer liability." Rand Corporation, 1992; Autor, David H., William R. Kerr, and Adriana D. Kugler. "Does Employment Protection Reduce Productivity? Evidence from U.S. States." *The Economic Journal* (2007): F189-F217; Heckman, James. *Law and employment: Lessons from Latin America and the Caribbean*. No. w10129. National Bureau of Economic Research, 2003; Kugler, Adriana D. "The effect of job security regulations on labor market flexibility. Evidence from the Colombian Labor Market Reform." In *Law and Employment: Lessons from Latin America and the Caribbean*, pp. 183-228. University of Chicago Press, 2004

7.1.2 Welfare policies

In addition to the Island's labor laws, Puerto Rico residents may also face disincentives to participate in the formal labor market due to rules attached to various welfare benefits, including the Nutritional Assistance Program (PAN), Mi Salud (Medicaid), Section 8 public housing, TANF, WIC, and other programs.

These benefits are sometimes stereotyped with a claim that “welfare pays more than work.” While this may be true in isolated cases, the broader problem occurs when welfare beneficiaries work in the formal sector and receive earnings, which triggers a reduction in their benefits. The phase-out of government transfer benefits as earned income increases acts as a tax to disincentivize formal employment, as effective hourly wage (income received by working minus the loss of benefits) can be substantially lower than the formal hourly wage received. For many citizens, working in the informal sector and collecting transfer benefits can often result in higher effective income than working in the formal sector.

While transfer benefits in Puerto Rico are not more generous than on the mainland in dollar terms, they *are* more generous relative to generally lower earnings on the Island. When benefits are phased out as a beneficiary works, loss of benefits may be larger relative to earnings than for a mainland worker. This can serve as a greater disincentive to work than on the mainland.

It is difficult to quantify how large such disincentive effects may be due to limitations on the data available. Different individuals entitled to different sets of benefits are thus faced with various incentives that inform the ways they engage with the labor market. It is reasonable to conclude that for many welfare beneficiaries, formal sector work may sometimes do little to increase household incomes.

For individuals receiving food stamps, Mi Salud, TANF and public housing, it often makes little financial sense to work at the minimum wage in the formal sector. For a full-time minimum wage worker the loss of benefits will offset most or all income received from work, leaving the household no better off.³⁶

Though few Puerto Rico residents receive all these benefits,³⁷ even receipt of a single type of benefits can alter incentives to engage in the formal workforce. For instance, a single mother with two children and annual income below \$4,900 is eligible to receive approximately \$4,229 in annual PAN (“food stamp”) benefits. But should that individual work 35 hours per week at the minimum wage, her annual earnings of \$12,180 would cause her to lose eligibility for food stamps. Net of taxes on her earnings, working full-time would increase her household's annual income by only \$7,002, equivalent to an hourly wage of only \$3.86. Under those conditions, some individuals may choose not to work in the formal labor market.

Even when TANF and Section 8 housing benefits are excluded, monthly income paid to a minimum wage worker with two children is only \$329 greater than what he or she could receive from government benefits.³⁸ In this example, effective hourly pay (the amount received

³⁶ Burtless, Gary, and Orlando Sotomayor. “Labor supply and public transfers.” In *The Economy of Puerto Rico: Restoring Growth* (2006): 82-151

³⁷ See Héctor R. Cordero-Guzmán, “The production and reproduction of poverty in Puerto Rico,” in Nazario, Carmen R., ed. *Poverty in Puerto Rico: A Socioeconomic and Demographic Analysis with Data from the Puerto Rico Community Survey* (2014). Inter American University of Puerto Rico, Metro Campus, 2016. Cordero. Notes that the number of TANF beneficiaries in Puerto Rico is relatively modest and many, due to age or disability, are unlikely to work under any conditions

³⁸ Advantage Business Consulting. “Beneficios de las Personas Elegibles al TANF vs. Escenario de Salario Mínimo Federal.” Prepared for the Universidad Interamericana, May 2015

from working more than what the individual could receive from government benefits without working) is only about \$2.35.

Mainland states face many of these same incentive issues, which they address in two ways. First, residents of mainland states are eligible for the Federal Earned Income Tax Credit (EITC), which provides a partial refund against Federal income taxes for eligible low-income workers. Many states supplement the Federal EITC to increase benefits to recipients. By increasing the reward to work, the EITC has been shown to increase labor force participation.³⁹ However, because Puerto Rico residents do not pay Federal income taxes they are not currently eligible for the Federal EITC.

Likewise, the Federal Government requires that food stamp programs on the mainland (Supplemental Nutrition Assistance Program, "SNAP") contain a work requirement. In general, working-age SNAP beneficiaries on the mainland must register for work, cannot turn down a job if offered, and may be required by the state to attend education or work training classes. In addition, Federal law requires that non-disabled adults without dependents must work, attend education, or volunteer at least 20 hours per week to maintain eligibility for benefits.

Puerto Rico's labor and welfare laws may help explain why, despite the Island's natural beauty, attractions and ease of access from the U.S. market, employment in tourism-related industries is low. According to the Federal Bureau of Labor Statistics (BLS), Puerto Rico employs only 80,000 individuals in the leisure and hospitality industries – 10,000 fewer tourism-related jobs than the state of Nebraska, which both lacks Puerto Rico's natural assets and has an overall population over one-third smaller than Puerto Rico.

7.1.3 Workforce preparedness

Finally, Puerto Rico's potential workforce is also not well prepared to fill jobs currently needed by the economy. Poor skill development is largely driven by low educational quality and attainment. Around 20% of Puerto Rico's working age population has less than a high school diploma (compared to U.S. average of under 12%), and about 30% of that same population have a college degree, which is about 3% below the mainland average.⁴⁰ Meanwhile, Puerto Rico's public schools are underperforming. PRDE K-12 schools have shown declining performance over the past two decades. Today a quarter of students do not graduate high school at all,⁴¹ while the remainder graduate below basic proficiency levels: in standardized tests, only about half perform at a basic level in Spanish,⁴² 35% perform at a basic level in Mathematics, 35% perform at a basic level in English and 43% at a basic level in Science.⁴³ Of the 71 countries measured through OECD PISA scores, Puerto Rico scored 57th in reading (U.S. 24th), 63rd in science (U.S. 25th), and 65th in math (U.S. 40th).⁴⁴ These challenges

³⁹ See Eissa, Nada, and Jeffrey B. Liebman. "Labor supply response to the earned income tax credit." *The Quarterly Journal of Economics* 111, no. 2 (1996): 605-637

⁴⁰ Federal Reserve Bank of New York, "An Update on the Competitiveness of Puerto Rico's Economy," July 31, 2014. <https://www.newyorkfed.org/medialibrary/media/outreach-and-education/puerto-rico/2014/Puerto-Rico-Report-2014.pdf>

⁴¹ Puerto Rico Department of Education Consolidated State Plan (ESSA), 2017; <https://www2.ed.gov/admins/lead/account/stateplan17/prconsolidatedstateplanfinal.pdf>

⁴² As of ESSA Consolidated State Plan 2017

⁴³ "Basic level" is defined by National Assessment of Education Progress test administrator as "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade" and is the bottom of three levels of achievement with the other levels being "proficient" and "advanced." Source: "Medición y Evaluación para la Transformación Académica de Puerto Rico (META-PR) 2015-2016 School Year," PRDE (2016)

⁴⁴ Programme for International Student Assessment (PISA) 2015 Assessment and Analytical Framework, The Organization for Economic Co-operation and Development, August 31, 2017

contribute to Puerto Rico's rate of youth unemployment, which is more than double the rate in the U.S. mainland.⁴⁵

Puerto Rico has therefore not solved the supply or demand side issues with its labor market – creating huge barriers to economic growth and sustainability for the Island.

7.2 Future vision for the Puerto Rican human capital and welfare reform

Changes to labor and welfare laws are controversial. It is difficult to ask Puerto Rican residents to give up benefits and job protections when, through the economic downturn and then Hurricane Maria, they already have lost so much. Nevertheless, dramatic changes to Puerto Rico's labor market policies are necessary to provide opportunity for a greater standard of living at home, reversing the Island's history of high poverty, constrained budgets, and pressure for young Puerto Ricans to leave their home for the mainland.

To ensure Puerto Rico can provide opportunities for its people for years to come, structural reforms must make it easier to hire, encourage workforce participation, and enhance student outcomes and workforce development opportunities to ensure a pipeline of prepared and appropriately-skilled individuals. The Government should aim to **increase the labor force participation rate to 47% and reduce the youth unemployment rate to 20.2% by FY2023**. In both cases, these results would roughly halve the current gap between Puerto Rico and the lowest U.S. state (West Virginia).

Unfortunately, the Legislature has failed to pass the Labor Reform Package that was outlined in the April 19, 2018 version of the New Fiscal Plan and failed to repeal Law 80 that was required by the May 30, 2018 version of the New Fiscal Plan. Accordingly, while successful human capital and welfare reforms would have been projected to generate approximately \$39 billion in additional revenues by FY2048 and over ~\$320 million from FY2018-FY2023, the Legislature's demonstrated noncompliance with the comprehensive labor reform requirements of previous fiscal plans has forced the removal of these projected revenues from the New Fiscal Plan.⁴⁶ As a result, the New Fiscal Plan projects that the human capital and welfare reforms that have been committed to will only generate 0.3% growth for the Island by FY23, rather than 1% growth.

7.3 Structural reform initiatives for human capital and welfare reform

Labor market reforms should increase the availability of jobs while increasing incentives and preparedness to work. To accomplish this broad-based reform, the Government must enact welfare reform measures including an earned income tax credit (EITC) for low-income workers and a work requirement for able-bodied PAN beneficiaries, and implement programs to develop critical skills in the workforce and improve employment readiness for jobseekers and students.

⁴⁵ The World Bank Group, via International Labour Organization, ILOSTAT database. Data retrieved in March 2017. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>

⁴⁶ . Human capital and welfare reform as described in this Fiscal Plan is projected to result in total 0.3% GNP growth by FY2021

7.3.1 Welfare structure reforms

To implement the human capital and welfare reform package, address labor market challenges and encourage residents to participate in the formal labor market, the Government must launch an Earned Income Tax Credit (EITC) program by January 2019, raising pay for formal laborers. The Government also must institute a work requirement for the Nutrition Assistance Program (PAN) by July 1, 2018, with no transition period (e.g., full requirements regarding work will begin in July).

Earned Income Tax Credit (EITC)

The EITC is a benefit for working people with low to moderate income. To qualify, people must meet certain requirements and file a tax return, even if they do not owe any tax. The EITC reduces the amount of taxes owed and may result in a cash refund if the benefit is higher than owed taxes.

Since welfare reform in 1996, the EITC has become the cornerstone of anti-poverty policy in the United States. It has refocused the U.S. safety net on working families, dramatically increasing employment among single women with children and removing more children from poverty than any other program. In the U.S., this translates to approximately 6.5 million people (half of whom are children) lifted out of poverty. Further, the EITC improves employment rates (a \$1,000 increase in EITC benefit has been tied to a 7.3 percent increase in employment)⁴⁷ and provides increased opportunities for individuals to invest in their own futures with education, training, childcare, or other costs that improve longer-term outlook. It has proven a powerful incentive to transition into the formal labor force and file taxes.

From 2006 to 2014, Puerto Rico had a Worker's Tax Credit, which was later discontinued due to its ineffective application and as a cost saving measure. This prior Work Credit applied to 45% of all tax filers at a cost of \$152 million in its last year of implementation. It was smaller than Federal EITC programs (\$150-450 versus ~\$2,000 average credit), and did not eliminate high implicit tax rates on low-income employees or do enough to incentivize formal employment.⁴⁸

In Puerto Rico, implementation of the new EITC should be similar to the Federal EITC but adjusted to the relative wages of the Island. Eligible recipients should receive credits according to their marital, family, and earned income. As earnings increase, the benefit should increase up to a specified cap; at the cap, it would plateau and eventually decrease at the phase-out income level until it reaches \$0 (**Exhibit 29**), resulting in an average benefit of \$525.30 per individual per year. This structure diminishes the "benefits cliff" many face as their earned income increases, rewarding citizens who participate in the formal economy.

⁴⁷ Hoynes and Patel 2015, <http://www.taxpolicycenter.org/briefing-book/how-does-eitc-affect-poor-families>

⁴⁸ New York Federal Reserve Bank, 2014

EXHIBIT 29 EITC BENEFIT FORMULA

EITC Benefit Formula, \$

- Benefits begin with the first dollar of reported income. As income increases, **benefits also increase at the phase-in rate** (different depending on household size), **up to the maximum credit**
- When income **reaches the phase-in cap, the benefit increase ceases**. Benefits remain constant at income levels that fall between the phase-in cap and phase-out start
- When income **reaches the phase-out start, benefits begin decreasing at the phase-in rate** for each additional dollar earned, **until income reaches the income cap** (at which point benefits are \$0)

Number of Children	Phase-in rate, %	Phase-in cap, \$	Phase-out start, \$	Individual/ Single income cap, \$	Married income cap, \$	Maximum Credit, \$
0	5.00%	6,000	18,000	20,500	21,750	300
1	7.50%	12,000	13,000	20,500	24,250	900
2	10.00%	15,000	16,000	28,500	34,750	1,500
3 or more	12.50%	16,000	17,000	33,500	42,000	2,000

For example, a single mother with two children working at minimum wage for 35 hours per week earns approximately \$12,180 annually. With EITC, she can qualify for up to \$1,500 in additional take-home pay per year, effectively raising the minimum wage by more than 12%.

The EITC program would cost approximately \$200 million per year, but the program will raise formal labor force participation significantly, providing a positive return on the investment. The EITC must be implemented no later than FY2019.

PAN Work requirement

While PAN, Puerto Rico's largest welfare program, is similar to the mainland SNAP, it is funded and administered separately and does not include a work requirement. As part of the human capital and welfare reform package that the Oversight Board projects will create substantial growth over the next 30 years, the New Fiscal Plan requires that the Government institute work requirements to qualify for PAN benefits.

Starting in July 2019, able-bodied participants aged 18-59 will be subject to a work requirement; Puerto Rico must complete its application for the program by July 2018. Like mainland SNAP, in full implementation this work requirement must become effective after the individual has collected PAN benefits for three months. The work requirement may be satisfied with 80 hours per month of paid work, volunteer work, and/or qualified training and education. General exceptions would include those under age 18 or over age 60, parents with dependents under age 18, as well as those who are medically certified as physically or mentally unfit for employment. Children, even if their parents do not work, will continue to receive the benefit.

Any program savings derived from the PAN work requirement must be redistributed to working beneficiaries, effectively increasing take-home pay for workers. The increased worker benefit shall take place through an expansion of the Earned Income Disregard, which will increase the amount of earned income eligible recipients can exclude in calculating the amount of benefits they can claim. For example, a family of four currently receiving PAN will lose the benefit after exceeding a maximum annual income of \$5,904. By creating a sliding scale after this amount, or allowing families to exclude a certain amount of earned income from this

calculation, Puerto Rico can ensure no one is disadvantaged by seeking work in the formal economy and that no families lose benefits prematurely.

The increase in PAN benefits for workers combined with the EITC would improve conditions for low-income workers in the formal economy and reduce poverty.

7.3.2 Workforce development programs

Human capital and welfare reforms should increase supply and demand for jobs; to fully close the gap and implement the human capital and welfare reform package, however, the Government must launch specific efforts to ensure that its future workforce is prepared with critical skills.

Workforce Innovation and Opportunity Act (WIOA)

First, the Government must update the WIOA State Plan to focus its programs and incentives on high-priority sectors and capabilities (e.g., aerospace, software development, and creative services). WIOA is the primary way in which the Federal Government invests in adult education and workforce development, and it is designed to help jobseekers access employment, education, and support services to succeed in the labor market, and to match employers with the skilled workers they need. The Government must broaden the list of core industries that qualify under WIOA, and focus on high impact economic sectors to provide a skilled workforce that meets the needs of employers in each specific region. It shall integrate this WIOA program with the broader promotional efforts of the Department of Economic Development and Commerce (DDEC). For example, an MOE Agreement with the Puerto Rico Department of Labor and Human Resources shall establish an apprenticeship program aiming to impact innovative industries and post-Maria labor market needs.

Youth development initiatives

In addition to WIOA, the Government should help develop critical skills in the workforce through multiple proposed initiatives, including:

- **Youth development:** Investment in STEM through targeted teacher professional development and related programs; apprenticeship programs through partnership with universities and local businesses; opportunities for work-based learning and business programs; occupational opportunities and certification programs
- **Higher education:** Curriculum development grants and scholarships for UPR students focused on high-impact sectors, e.g., the IT industry and Computer Science.
- **Current labor market:** Apprenticeship Programs through collaboration with the private sector; training & certification programs focused on the areas of reconstruction efforts; creation of a job council to coordinate development and employment opportunities for youth and the unemployed

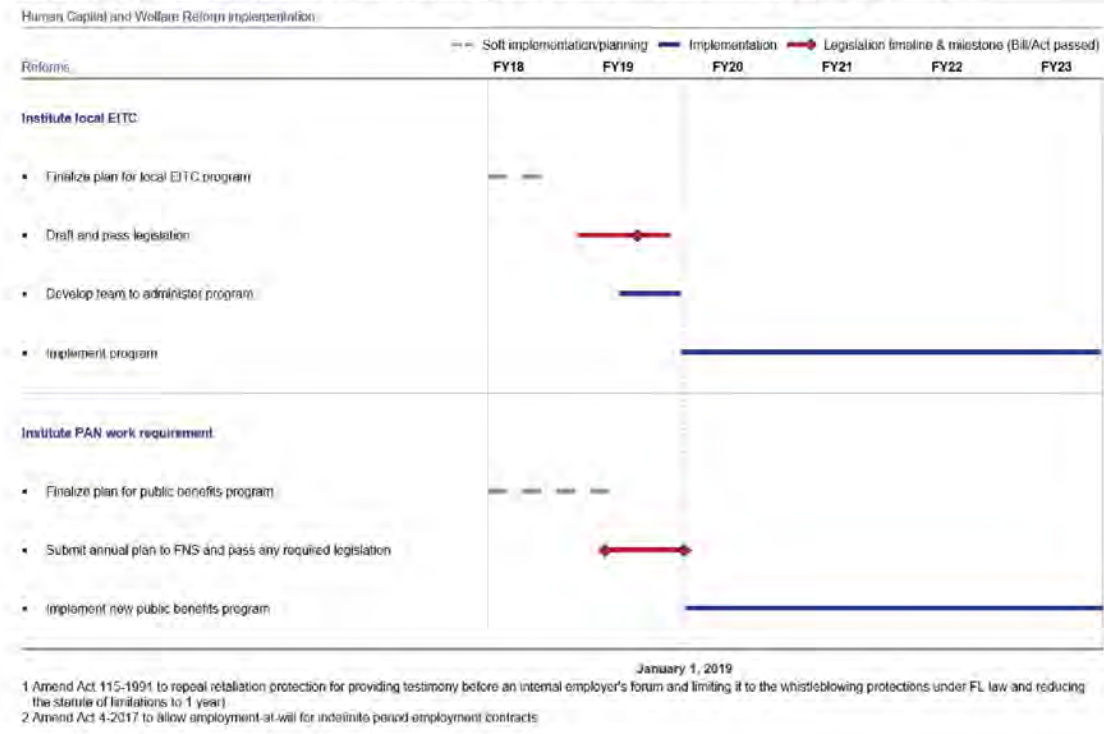
By pursuing aggressive reforms to incentivize job creation and formal labor market participation, and to improve the overall quality of human capital in Puerto Rico, the Government will fundamentally transform the Island's labor market for the better.

7.4 Implementation and enforcement of human capital and welfare reform

The New Fiscal Plan requires that EITC must be in effect by January 2019, and that the proposed PAN work requirements be included in the new PAN annual plan submitted July 1, 2018 to Food and Nutritional Services, and by July 1, 2019, that full requirements will take

effect, subjecting beneficiaries to the work requirement after 3 months of benefit collection. A qualified third-party analytical firm retained by the Government and acceptable to the FOMB must validate that these work requirements are being fully implemented. This third party will share equal information about its work with both the Government and FOMB.

EXHIBIT 30: HUMAN CAPITAL AND WELFARE REFORM IMPLEMENTATION TIMELINE



Chapter 8. EASE OF DOING BUSINESS REFORM

8.1 Current state of business regulation and investment attraction

One of the strongest means of increasing economic growth is by reducing a variety of inefficiencies related to building, expanding and attracting businesses. Easier-to-navigate regulations, less complex and faster permitting processes, and other legal and regulatory changes can encourage new businesses to hire employees and invest in growth. To quantify a jurisdiction's overall effectiveness in this regard, the World Bank created the Doing Business Index, which ranks 190 countries and entities worldwide on several core indicators. Countries and territories that have been able to meaningfully improve their ranking have shown real growth. For example, when the Republic of Georgia improved its ranking from #98 in 2006 to #8 by 2014, output per capita increased by 66% and business density tripled. Meanwhile, ease of doing business remains an area in which Puerto Rico has much room for improvement.

In the 2018 Ease of Doing Business Report, Puerto Rico was ranked 64th. This represents a 9-point decline from 2017 and is 58 spots lower than the U.S., which ranks 6th overall. There are some areas of strength: Puerto Rico placed 6th for Getting Credit and 9th for Resolving Insolvencies. It has also made recent efforts to digitize government services to improve speed

and accessibility, having digitized 27% of licenses transferred to the Unified Information System (SUI, a central and digital location for applications for licenses, incentives, autonomous municipalities, etc.) as of August 2017. However, when compared to the mainland, Puerto Rico has several areas for improvement, in particular:

Getting Electricity (rank 69, U.S. 49): Energy costs remain a major inhibitor to operating large-scale business efficiently on the Island. Electric bills for similar amounts of electricity can cost twice as much in Puerto Rico as it would in the U.S. mainland.⁴⁹ Puerto Rico's low ranking is also driven largely by low reliability of supply and transparency of tariff index -- rated a 4 (on a 0 to 8 scale) by the World Bank, compared to 8 in the U.S.⁵⁰

Dealing with Construction Permits (rank 138, U.S. 36): It takes 22 procedures and 165 days to get a construction permit in Puerto Rico, compared to 5 procedures and 89 days in the U.S. Obtaining a permit in Puerto Rico costs 6.2% of total future value of the permit (0.3% in U.S.). Despite these challenges, Puerto Rico is already strong in its building quality control index (12 on a 0-15 scale, compared to 8 for the U.S.).

Registering Property (rank 153, U.S. 37): It takes 191 days to register property in Puerto Rico, compared to 12 days in the U.S.

Paying Taxes (rank 161, U.S. 36): Puerto Rico requires 16 payments per year (11 in U.S.), and it takes 218 hours per year to prepare, file, and pay the corporate income tax (175 in U.S.). Puerto Rico also has a comparatively high total tax and contribution rate at 63.4%,⁵¹ compared to 45.8% in the U.S.

Trading Across Borders (rank 64th, U.S. 36): Despite the advantage enjoyed by Puerto Rico through its link to the U.S., its trading across borders ranking is more in line with regional peers (e.g., Dominican Republic and Costa Rica are 59th and 73rd, respectively). This is largely due to lengthy border handling times, which total 48 hours on average compared to 1.5 in the U.S.

In addition to needing to improve its overall business regulatory climate, Puerto Rico is lagging in its ability to attract investment and tourism. For example, in 2015-2016 Puerto Rico saw its number of jobs and establishments declining (before the effects of Maria),⁵² and it ranks 55th overall in the World Economic Forum's worldwide Travel & Tourism Competitiveness Index (while the U.S. rank is 6).⁵³ Countries that have focused on improving investment and tourism have seen great success. When Ireland created its Industrial Development Authority (IDA), it transformed Ireland into a popular location for new investments.⁵⁴ Ireland is now home to 9/10 of the world's top pharmaceutical and software companies. Meanwhile, when Barbados created its Tourism Product Authority in 2014, it began generating returns as soon as 1-2 years later: travel and tourism direct contribution to GDP increased by 5.4% in 2015 and 10.3% in 2016; and direct contribution of tourism to employment increased by 4.3% in 2015 and 9.8% in 2016.

⁴⁹ The Guardian, "Puerto Rico's Soaring Cost of Living," 2015. <https://www.theguardian.com/world/2015/jul/12/puerto-rico-cost-of-living>

⁵⁰ All specific U.S. comparison based on New York City, as averages vary across the country

⁵¹ The total tax rate measures the amount of taxes and mandatory contributions payable by the business in the second year of operation, expressed as a share of commercial profits

⁵² Puerto Rico Department of Labor and Human Resources, Bureau of Labor Statistics, "Puerto Rico Economic Analysis Report 2015-2016." https://www.doleta.gov/performance/results/AnnualReports/docs/2017_State_Plans/Economic_Reports/Puerto%20Rico/PR%20Economic%20Analysis.pdf

⁵³ As of 2015, latest available information for Puerto Rico. Puerto Rico was not included in World Economic Forum's 2017 report due to insufficient data

⁵⁴ In 2016, the IDA supported 60,000 jobs in 2016 at a cost of ~€9,000 per job sustained, and U.S. companies had invested ~€240 billion in FDI in the country

The Government has made important efforts recently to generate investment in the Island by creating the Destination Marketing Office (DMO) and Invest Puerto Rico (iPR) in 2017, with the goal of incentivizing foreign direct investment (FDI), private sector investment and tourism. However, while there are plans to operationalize both by the beginning of FY2019, these entities will need clear goals and metrics to be most effective.

8.2 Future vision for Ease of Doing Business

Puerto Rico should achieve a best-in-class business environment by taking targeted steps to improve rankings in key identified Doing Business Index indicators by FY2023, with the goal of closing the gap with the mainland U.S. by at least 50% from its 2018 rankings:

- Overall: Move from 64 to at least 57⁵⁵
- Getting Electricity: Move from 69 to at least 59
- Construction Permits: Move from 138 to at least 87
- Registering Property: Move from 153 to at least 95
- Paying Taxes: Move from 161 to at least 99
- Trading Across Borders: Move from 64 to at least 50

In addition, in line with best-in-class investment offices,⁵⁶ by FY2023 **iPR shall:**

- Create 54,000 new jobs (or average 9,000 new jobs per year)⁵⁷
- Lead 750 new capital investments (or average 150 per year)⁵⁸
- Achieve a \$20 return in 10 years per dollar invested⁵⁹

In line with best-in-class Caribbean tourism offices,⁶⁰ by FY2023 **DMO should close Puerto Rico's distance with the highest ranked Latin American country and therefore:**

- Improve World Bank Travel & Tourism Competitiveness Index ranking to at least 43, closing the distance to the highest ranked Latin American country in 2018
- Drive 5% annual growth in direct contribution of tourism to GDP and 5% annual growth in direct contribution to employment⁶¹
- Improve tourist service infrastructure score of 5.4 (2015) by 10% by improving number and quality of lodging services⁶²

⁵⁵ In line with the top ranked Latin American country in 2018

⁵⁶ Offices reviewed include: Ireland's Investment Development Agency (IDA), Enterprise Florida, JobsOhio, and Virginia's Economic Development Partnership (VEDP)

⁵⁷ Average of number of jobs created by IDA annually from 2005-2009 equaled 9,700/year. In five years, the U.S. was able to recreate all the jobs lost in the Great Recession, but this was in an environment of economic recovery and population growth. 15% is a more reasonable target for Puerto Rico

⁵⁸ Best practice examples: VEDP had 375 new investments in 2015; IDA had 244 total approved investments in 2016; VEDP tracked 320 companies counseled or participating in trade events

⁵⁹ VEDP estimates \$23 return on each dollar invested in 10 years (\$48 in 20 years). VEDP benchmark adjusted for PPP

⁶⁰ Such as the Barbados Tourism Product Authority and the Bahamas Ministry of Tourism

⁶¹ Current state: 2.7% direct contribution to GDP and 2.1% of total employment as of 2016. Puerto Rico has historically seen an annual 4% growth rate in travel & tourism's direct contribution to GDP and 4.6% growth rate in travel & tourism's direct contribution to employment (2017). World Travel & Tourism Council, "Travel & Tourism Economic Impact 2017 – Puerto Rico." Barbados set up its Tourism Product Authority in 2014; in 2015, the country saw a 5.4% increase in travel & tourism direct contribution to GDP and 4.3% increase in direct contribution to employment; in 2016, 10.3% increase in tourism GDP and 9.8% increase in tourism employment

⁶² 10% improvement bring tourist service infrastructure in line with Barbados at 5.9 quality score, top ranked Caribbean nation

- Establish exit surveys to measure visitor satisfaction, length of stay and spend for tourists to highlight key areas of improvement and focus for DMO⁶³

8.3 Core initiatives to improve the ease of doing business

To improve its Ease of Doing Business Rankings and overall tourism and investment outcomes, the Government should 1) pursue core initiatives such as digitizing government services, reducing border handling times, and driving deregulation and 2) establish clear metrics and regular tracking / reporting for iPR and DMO.

8.3.1 Initiatives to improve ease of doing business rankings (e.g., digitize government services, drive de-regulation)

While the Government has made major strides on digitization to date with the creation of the SUI, it must do more work to catch up to the mainland on key metrics that measure the time and energy expended to register, run, or expand a business.

Digitize Unified Information System (SUI). In addition to migrating government processes toward a streamlined and/or “one-stop shop” processes on SUI, the Government should move forms online to whatever extent is possible. This involves decoupling all non-related procedures from permitting, centralizing and digitizing permits. The Government should target 100% integration into SUI by end of 2018 for the following metrics: Licenses integrated into SUI; cases filed in SUI; cases issued in SUI; concerned entities integrated into SUI; and autonomous Municipalities integrated into SUI.

Reduce occupational licensing. Reducing occupational licensing requirements can encourage activity in the formal labor market. Therefore, the Government should take inventory of all occupational licensing requirements and undertake reforms to reduce unnecessary regulations, creating a more open labor market. It will also consider joining stateside agreements to recognize licenses obtained in other states, such as the Compact for the Temporary Licensure of Professionals. Such an agreement enables professionals with licenses from other states to enter the Puerto Rican labor market without undue barriers.

Deregulate on-Island freights. Reducing the cost of transporting consumer goods and holding inventory will improve the service of carriers and shippers (thereby enhancing competition) and lower the overall cost of doing business on the Island.

Deregulate condominium law. Currently, condominium laws discourage investment in real property by requiring unanimous approval by all title owners in the condominium to execute a project. Deregulation can promote the development of investments by rental residents, increase population density and accelerate decision-making.

Improve construction permitting. Streamline the process for business permitting and registrations by creating a streamlined, digitized one-stop-shop system for business processes, expanding on work initiated under Act 19. Construction permits specifically required a drastic reduction in the time required (particularly the 120 days, or 73% of total time, due to Municipal evaluation), and processes/procedures (reducing 22 procedures to at most 10). Finally, to reduce cost of receiving a construction permit, the Government should evaluate its municipal construction tax (80% of total cost).

⁶³ For example, The Bahamas Ministry of Tourism uses high quality exit surveys to track and respond to visitor satisfaction and tourist habits

Improve ease of registering property. Streamline and digitize the property registry system to reduce delays from the Property Registry Agency. Also, improve geographic coverage and transparency of information on the registry system.

Improve ease of paying taxes. Develop e-payment system for taxation wherever possible to reduce time taken to file corporate and sales tax to Hacienda. To reduce total tax rate, evaluate the municipal construction tax (in accordance with Construction Permits initiative above).

Improve access to reliable and affordable electricity. *In addition to the above streamlining and digitization initiatives for receiving permits, see Chapter 9 (Energy and Power Regulatory Reform) for further structural reforms to improve reliability.*

Improve trading across borders. Efficient movement of goods across borders is a critical element of economic competitiveness. Goods that arrive in Puerto Rico are subject to a mix of federal customs procedures if coming from another country (administered by U.S. Customs and Border Patrol, CBP), and local procedures (e.g., certain tax payments). In either case, downstream infrastructure challenges (e.g., in port ingress/egress capacity, internal transportation inefficiencies and lack of capacity, and power infrastructure), can have upstream impacts on the ability to quickly move goods in and out of the Commonwealth. According to the World Bank Doing Business Rankings, the typical time at import related to port or border handling in San Juan is 48 hours, relative to 1.5 hours in New York or Los Angeles. Improving the overall movement of goods requires an integrated effort that looks across transport infrastructure and programs at the border administered by the Government of Puerto Rico, along with close collaboration with the federal government (primarily CBP).

Domestic transport is also a major concern in Puerto Rico. Ports are spread across the Island with poor connectivity (e.g., between Ponce and San Juan), and the flow of goods across the Island's major highways and big cities is slowed by infrastructure productivity inefficiencies. Reducing this barrier to the efficient transport of goods across the Island could have a significant effect on Puerto Rico's economy, with various studies concluding that transportation improvements can lead to an uptick in growth⁶⁴.

In addition to improving infrastructure productivity, Puerto Rico can focus on improving accessibility for foreign and mainland companies, and easing the process of moving goods into and out of the Island. While the scope of what some other countries have done to improve border conditions is beyond the scope of what Puerto Rico is responsible for, many of the same principles apply. For instance, from 2012 to 2018, El Salvador streamlined its processes, invested in increased automation technologies, and pinpointed areas of inefficiency at its borders where additional staff were added. During those same years, El Salvador's trading across borders ranking rose 26 spots⁶⁵.

Puerto Rico can use some of these strategies (e.g., automation, staff augmentation where needed, and research into specific areas of inefficiency) in tax collection and other areas where Commonwealth officials take full responsibility. By combining these principles with a robust collaborative effort in engaging the U.S. Port Authority and CBP, Puerto Rico could achieve its

⁶⁴ In California, the Mercatus Center out of George Mason University found that a 10% reduction in congestion in one of the state's urban centers corresponded to a 0.25% GDP increase and 0.18% wage growth. In New Zealand, the country's Institute of Economic Research estimated that measures to bring the roads in Auckland (New Zealand's largest urban center) to their intended capacity during the work week could boost the city's GDP by 1-1.4%. They also estimated that the benefit to the labor market could be an increase in employment of between 0.17-0.27%, and an increase in real wages of 0.31-0.48%.

⁶⁵ <http://www.doingbusiness.org/Reforms/Overview/Topic/Trading-across-Borders>, and "Doing Business 2018: Reforming to Create Jobs" by the World Bank Group

goal of halving the gap between its current trading across borders ranking and that of the mainland United States.

8.3.2 Invest Puerto Rico (iPR) and the Destination Marketing Office (DMO)

The Government should plan to make iPR and DMO fully operationalized by the end of FY2018, and to ensure effectiveness, each organization shall set specific targets and a plan to evaluate progress.

iPR should begin tracking data (both inputs and outcomes) to inform decision-making – for example, to predict and assess project ROI before providing funds or discontinue projects that are not driving results based on formalized project tracking. Further, iPR should publish quarterly or annual reports, addressing key metrics and any underperformance; hold regular (e.g., quarterly) Board meetings; and track/course-correct projects on an ongoing basis, including incorporating feedback from investors and data trends.

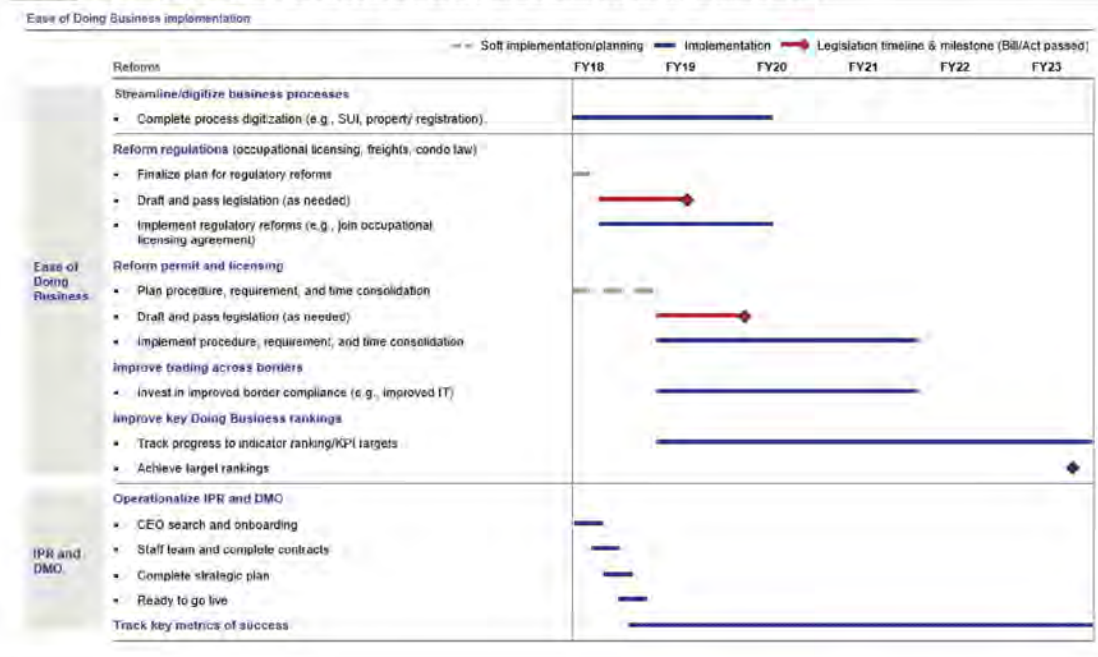
DMO should track tourism statistics in Puerto Rico and compare to other tourism industries worldwide.⁶⁶ To determine its own standing, it should conduct regular visitors' surveys to assess satisfaction and quality of tourism services and strive for continuous improvement. Further, DMO should publish quarterly or annual reports addressing key metrics and any underperformance and should also update on targets, course-correct, and incorporate visitor feedback on an ongoing basis.

8.4 Implementation and enforcement of Ease of Doing Business reform

To achieve the New Fiscal Plan's growth projections, ease of doing business reforms must be implemented immediately, with targeted operationalization of most initiatives by FY2019 (**Exhibit 31**).

⁶⁶ For example, utilizing the Tourism Satellite Account tool leveraging economic tourism data

EXHIBIT 31: EASE OF DOING BUSINESS IMPLEMENTATION TIMELINE



Chapter 9. ENERGY AND POWER REGULATORY REFORM⁶⁷

Over the next five years, the power sector in Puerto Rico must be transformed and modernized to support the delivery of reliable and affordable power. The Commonwealth must implement regulatory reform to enable a successful transformation and the resulting growth that the New Fiscal Plan projects. As detailed in the New Fiscal Plan for PREPA, the goal of the transformation of the power sector is to provide the citizens of Puerto Rico with low-cost, reliable, and resilient power delivered by an efficient and financially sustainable utility. The pillars of this transformation include restructuring the power generation mix to leverage low-cost sources of power, rebuilding and modernizing the power grid, implementing an operational cost transformation, executing a large-scale capital investment program with Federal funds and private sector investments, restructuring the power industry by bringing in private operators, and establishing a new rate structure to allocate costs fairly and equitably across customers.

A strong and independent regulator of the power sector is required and will additionally support the success of the power sector transformation. Clear oversight authority should provide certainty throughout the process and should provide potential investors with confidence in the appropriateness of rate structures and the overall stability of the power sector in Puerto Rico. Furthermore, the long-term sustainability of Puerto Rico's energy sector depends on having a strong, independent, and professional regulator.

⁶⁷ Although the FOMB does not consider and has not considered anything in the New Fiscal Plan as a "recommendation" pursuant to Section 205(a), to the extent that the Government of Puerto Rico considers or has considered anything in this Chapter a "recommendation" pursuant to Section 205(a), the FOMB hereby incorporates it into the New Fiscal Plan pursuant to Section 201(b)(1)(K).

9.1 Current and future state of energy regulation

The current regulator of the power sector in Puerto Rico is the Puerto Rico Energy Commission (PREC). The PREC has the responsibility to “regulate, monitor and enforce the energy public policy of the Commonwealth of Puerto Rico” as provided by a single public monopoly provider.

Under a future transformed power sector in Puerto Rico, PREC or a new regulator will continue to have these responsibilities as it applies to regulating, monitoring, and enforcing the energy policy of the Commonwealth of Puerto Rico, acting as the regulator for all participants in the energy sector.

The ideal regulator for Puerto Rico can be modelled off the traditional Public Utilities Commission model used to oversee mainland U.S. utilities. The regulator should be independent of the Government and operate under public service ethics and conduct rules. The regulator should have autonomy in decision-making and the authority to approve the Integrated Resource Plan (IRP), regular rate cases at two- or three-year intervals or through a formulaic rate mechanism and/or flexible rate case intervals consistent with the Fiscal Plan.

9.1.1 Structure of and funding for the Puerto Rico Energy Commission

In line with best practices for regulatory commissions (e.g. California Public Utilities Commission, Hawaii Public Utilities Commission, New York Public Services Commission), the PREC should be headed by 5 commissioners who serve staggered 6-year terms. The commissioners should be appointed based on their technical credentials, with the appointment potentially subjected to oversight by an expert panel, for example through a candidate list. All commissioners should deliberate and vote on all cases, though some commissioners may decide to take on “lead” roles in some cases. The commissioners should be supported in their oversight role by a professional civil servant staff that has utility expertise. The roles of advisory and advocacy staff should be strictly separated to better support both fairness and due process. All commission decisions in adjudicatory proceedings should comply with the traditional requirements of administrative procedure. Separate from the regulator, there should also be an independent ratepayer advocate. This role could potentially be filled by the Oficina Independiente de Protección al Consumidor (OIPC).

The new regulator should be funded by the same mechanism as mainland regulators, with financing provided through rates, as independent funding for a strong regulator should be the best ROI for customers to protect their interests, increase transparency, and reduce system costs. Dedicated funding for power sector regulation should be prescribed in the charter legislation. The rate should be increased after the transformation to better reflect the additional duties the regulator will have and to bring Puerto Rico in line with other similar jurisdictions. The regulator will need an annual budget of \$20-\$30 million dollars⁶⁸, which is roughly equivalent to a surcharge of \$0.0015 per kWh.

9.1.2 Mandate and authorities for the strengthened regulator

To be effective, the regulator must have a clear mandate to deliver reliable, safe power at an affordable cost. The tools and authorities that the energy regulator should have to enforce this mandate are as follows:

- Approval of the rate case developed by the utility operator, including ability to mandate target rates and the use of rate structure and design tools that create predictability,

⁶⁸ Estimate in line with other jurisdictions: the Hawaii Public Utilities Commission had revenues of \$19M in FY2017 to serve a population of 1.4 million. \$5 million annual funding is assumed for the future state energy regulator in the Commonwealth budget; the New Fiscal Plan for PREPA assumes \$15 million annual funding through rates beginning in 2020

minimize risk and “rate shock”, and create incentives to support equitability, economic development, and economically efficient rate designs

- Evaluation of utility operator performance incentive and total compensation structure, including a reasonable, market-based return on equity
- Approval of an updated IRP, which will guide generation and capacity needs, including approval of purchased power agreement and other contract terms and Certificate of Public Convenience and Necessity (CPCN) regulation for individual generators
- Support for and integration of renewables, distributed generation and new energy technologies as appropriate and consistent with the PREPA Fiscal Plan (e.g., through IRP process and enforcement of applicable renewable portfolio standards)
- Mechanisms providing for efficient enforcement of final orders and determinations
- Solicitation of input from public related to rates, IRP, and transformation process, with such input to be shared with the Oversight Board while it is in existence

9.2 Regulatory reform implementation and transition

To enable the power sector transformation, the transition to a stronger regulatory structure must occur immediately.

The details of the future-state regulatory framework should be designed by a working group comprised of experienced, professional, and impartial organizations and individuals.

However, during the transition period before the transformation takes place, the role of the Oversight Board with respect to energy sector regulation should be as follows based on its rights, powers, and duties in PROMESA:

- *IRP*: The Oversight Board approves revenue requirements and expenditures, including a capital plan, in the New Fiscal Plan for PREPA. Given the IRP process will be significantly more detailed and have access to additional data, the capital plan and revenue requirements in the transformation section of the new Fiscal Plan for PREPA should be one of the scenarios tested and considered in the IRP process, but in no way is binding on the IRP.
- *Budget and rate-making*: The Oversight Board also approves a yearly budget that aligns with the fiscal plan and thus should align with revenue requirements and expenditures.
- *Utility debt*: The Oversight Board approves restructuring of existing debt through the Plan of Adjustment for PREPA.
- *Transformation*: As part of the Title III proceedings for PREPA, the Oversight Board approves contract amendments and terminations, entering into new contracts (including any concession agreements) and asset sales.

The role of the regulator during the transition period should be as follows:

- *IRP*: The regulator will approve the IRP. The IRP should test the scenario and alternatives in the Fiscal Plan to achieve the principles of affordable, reliable and secure power. The regulator should ensure that the IRP process is open and transparent so that third parties can understand inputs and methodologies behind each scenario and be able to participate and attend hearings to understand tradeoffs and decisions driving approval of the final capital plan and revenue requirement.

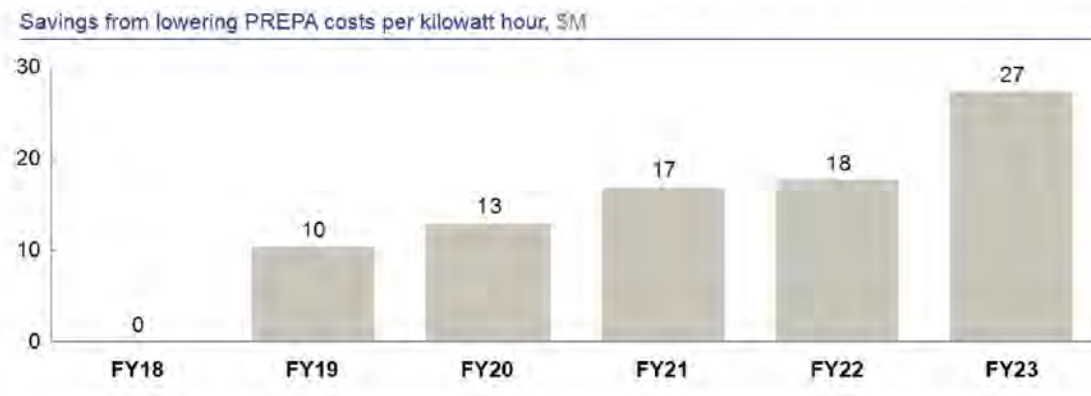
- *Budget and rate-making:* The regulator authorizes bridge rate (likely formula based) in line with the budget as certified by the Oversight Board to support PREPA during the transition to a new rate structure.
- *Utility debt:* No additional authorities because debt service implied by the current rate case will be superseded by the Oversight Board-approved budget and Plan of Adjustment.
- *Other:* The regulator will hear cases pertaining to microgrids, energy storage and distributed generation development during the transition period.

During the transition period it is critical that the regulator maintains sufficient capabilities and staff to continue to regulate the power sector.

Following the transition period, the regulator should be fully funded with the powers and authorities outlined in Section 9.2.2. The Oversight Board shall retain its powers as long as PREPA remains a covered entity under PROMESA.

Regulatory reform is necessary for the successful transformation of the power sector and PREPA which should generate significant savings to the Commonwealth through the lowering of PREPA costs per kilowatt hour to an aspiration rate of under 20 cents per kWh by FY2023.

EXHIBIT 32: COMMONWEALTH SAVINGS FROM LOWER PREPA COSTS



Chapter 10. INFRASTRUCTURE REFORM

Relative to the mainland U.S., Puerto Rico's infrastructure outcomes rank near the bottom in quality and operating performance. In particular, poor transport infrastructure has contributed to congestion and thus impacted the ease of doing business on the Island. The capital investments enabled by post-Maria Federal recovery funding offers a unique opportunity to make transformational investments that support economic development. This moment is unique as FEMA has expanded overall flexibility and willingness to support more transformational investments under Section 428 (under Title IV of the Stafford Act).

10.1 Current state of infrastructure and capital investment

Infrastructure investment as a percentage of GDP has decreased from 3.3% in 2000 to 1.4% in 2014⁶⁹, indicating a lack of recent experience in large-scale building. The Government also has a history of failed large-scale projects. For example, Tren Urbano was scheduled to open on July 1, 2001 after beginning construction in 1996; it finally opened in 2005 and the budget for the project increased more than 60%, from \$1.38 billion to \$2.25B.

In addition to the challenges with infrastructure delivery and maintenance, the poor state of transport related infrastructure is a key constraint on mobility. Puerto Rico is ranked 51st out of 52 (states + DC + PR) for quality of roads and is ranked 45th out of 52 (states + DC + PR) for congestion of roads⁷⁰. Urban congestion is a particular problem in San Juan and on major highways. San Juan is in the top 15% of most congested cities worldwide, according to the 2017 INRIX Traffic Scorecard. It incurs daily delays of ~54,000 hours on average, costing ~\$165 million annually in commuter cost, without including the impact of congestion on the transport of goods, or the costs of unreliability or lack of safety.

Improving traffic on major highways along which goods travel, such as PR-52 and PR-18, is critical to enhancing growth. A 25% reduction in congestion can reduce travel cost by over 6% (NCHRP Report 463). Investments to reduce congestion should prioritize the most economically important trips, or in provide alternative travel capacity to enable access despite congestion (Sweet, 2013). Targeted investments, such as “smart intersections”, dynamic tolls and reversible lanes using movable barriers will reduce delays on key routes and journeys, and facilitate economic growth⁷¹.

Meanwhile, there are several critical elements that Puerto Rico should include to capitalize on the transformational opportunity afforded by historic Federal capital funding.

- a) **Build organizational structures and capabilities** in government to prioritize and deliver projects faster and at lower cost;
- b) **Prioritize projects with the highest long-term benefit-cost ratios** taking account a variety of monetizable and non-monetizable benefits; and
- c) **Systematically leverage private sector capabilities** to improve overall public outcomes

10.2 Organizational structures and capabilities

When creating a reconstruction plan, it is imperative to build a central capability with the skills and mandate to design an overall recovery portfolio and oversee efficient project delivery. As such, the Government created the Central Recovery and Reconstruction Office (CRRO) as a Division of the P3 Authority to lead the coordination, development, and execution of long term recovery and reconstruction efforts. The CRRO has been created based on leading practices used in many jurisdictions, including New Jersey, Louisiana, New York and New Zealand, to ensure higher accountability, transparency and coordination of disaster recovery efforts.

⁶⁹ Puerto Rico Planning Board

⁷⁰ U.S. Bureau of Transportation Statistics

⁷¹ See, Jamal Haidar, “The impact of business regulatory reforms on economic growth,” *Journal of the Japanese and International Economies*, Vol 26, 2012, pp. 285-307. In addition, there are several studies that review the impact of decongestion of roads on growth. Two examples are: New Zealand Institute of Economic Research, *Benefits from Auckland road decongestion*, July 2017, and Clifford Winston and Quentin Karpilow, *A New Route to Increasing Economic Growth Reducing Highway Congestion with Autonomous Vehicles*, Mercatus Working Paper, January 2017

The CRRO should commit itself to a decision-making framework that incorporates not only the degree of damage, but also the future level of service required from the asset and future risks to that asset, when deciding how that asset should be rebuilt. New York and New Jersey received ~\$10 billion in 428 funding post Hurricane Sandy, which decreased their vulnerability and helped ensure that capital dollars spent then did not simply have to be re-spent cleaning up after the next storm. The CRRO should aggressively pursue next level resiliency activities with Federal dollars, to ensure that Puerto Rico's critical assets are sufficiently protected from future hazards.

Specific CRRO activities should include:

- Developing, presenting and administering recovery action plans
- Financing, executing and effecting infrastructure projects related to recovery efforts
- Monitoring contracting for compliance and effectiveness purposes
- Implementing and enforce checks and balances for procurement and approval of contracts and payments
- Deploying a proven grant-management software and provide external visibility via frequent status updates to its public website
- Coordinating and channeling all efforts and activities of the Government related to recovery efforts

10.3 Prioritization and delivery

The Government should employ infrastructure delivery best practices (e.g. prioritization of projects for economic impact, fast-track permitting, procurement reform). These best practices improve efficiency and transparency and should be applied to all areas of infrastructure expenditure of the Commonwealth including: reconstruction, construction and maintenance of government owned assets, and procurement of infrastructure through public corporations and Public-Private Partnerships (P3s).

The Government should pursue five sub-strategies:

Set Commonwealth infrastructure priorities to guide investment

- Set target outcomes to guide prioritization of projects
- Develop clear, systematic cost-benefit analysis and quantitative scoring to prioritize projects based on return on public investment and the ability to implement

Accelerate the pre-construction process

- Identify opportunities for local review and permitting, for as many projects as possible, to avoid Federal delays
- For projects requiring local review, revisit existing process to reduce hurdles, and ease of meeting them, wherever possible
- Where Federal approval is needed, focus on: clarifying decision rights and confirm process with all major stakeholders; harmonizing local processes to match Federal processes and seeking waivers where applicable; ensuring transparency and clarity from Federal Government on where projects are in the pipeline; and utilizing Title V of PROMESA

Build sustainable funding models and financing strategies

- Leverage external capital, by expanding PPPs and access to Federal credit (e.g., TIFIA) and grant (e.g., INFRA) programs
- Increase bankability, and eligibility for participation in a PPP by deploying monetary and non-monetary incentives (e.g., recyclability of proceeds from asset monetization, including monetization of Government-owned real estate to support the revenue models for PPPs)
- Provide support to de-risk greenfield investment (e.g., reduction of early stage demand risk)

Promote procurement and delivery best practices

For projects that receive Commonwealth funding, ensure such projects:

- Develop an aligned owner organization with streamlined processes (e.g., early procurement involvement, accountable owner team oversight)
- Build an effective contracting strategy (e.g., tailored bidding process and pricing models, change order management tools)
- Utilize advanced procurement tools and approaches (e.g., rigorous clean sheet models, quantified view of Total Cost of Ownership drivers)
- Implement lean construction and digital techniques

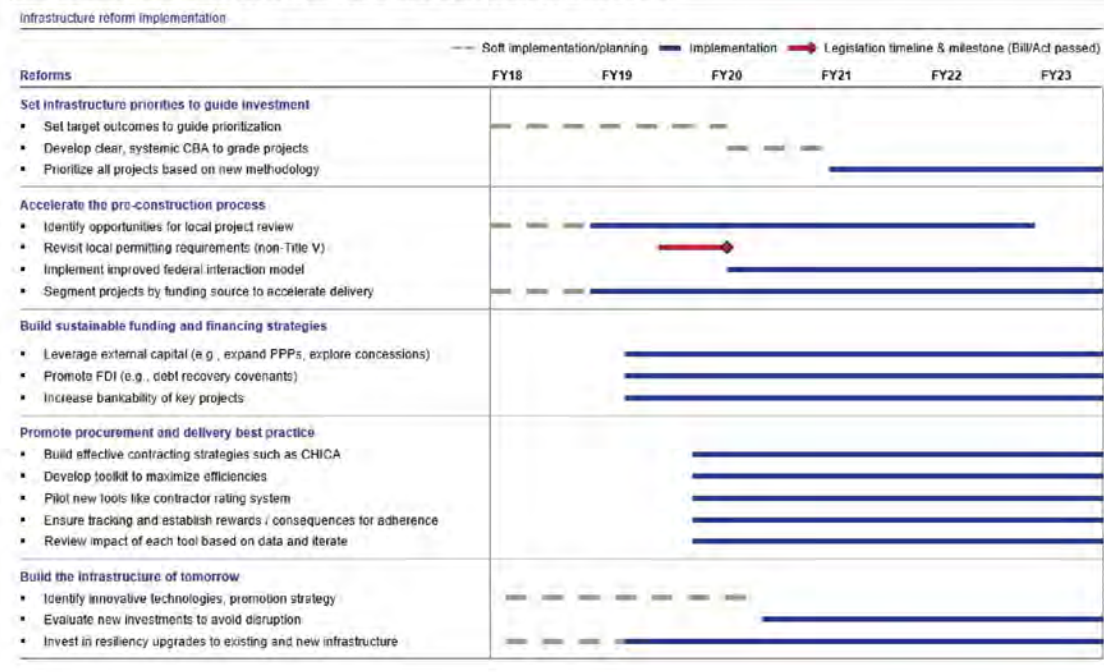
Build the infrastructure of tomorrow

- Identify innovative technologies (e.g., automotive transformations, drones, new tunnel creation methods, the Internet of Things) and develop a strategy to actively promote them (e.g., AV pilot test zones), or at least find a way to not stifle their development (e.g., job trainings for displaced workers)
- Critically evaluate major new investments against future trends, to avoid disruption by innovation (e.g., avoid the buildout of excessive parking given increase in shared mobility and growth of autonomous vehicles in airports)

10.4 Implementation of infrastructure reform

The implementation timeline for infrastructure reform can be found below (**Exhibit 33**).

EXHIBIT 33: INFRASTRUCTURE IMPLEMENTATION PLAN



PART IV: Transforming government to better serve the Island

In addition to structural reforms, the Government must also implement fiscal measures to create a sustainable fiscal future for Puerto Rico. Fiscal reforms should reduce costs while maintaining or improving the quality of important services. The wide range of government efficiency initiatives shall target an increase in revenues through new and more efficient collections activities, while decreasing government expenditures by ensuring reasonable usage of resources. The measures include the following:

Office of the CFO (*Chapter 11*). The Office of the CFO, a function of Hacienda, (“OCFO”), will also be responsible for – and crucial to achieving – a variety of reforms to ensure the responsible financial stewardship of the Island’s resources. For example, through fiscal controls and accountability, the OCFO shall provide oversight to reduce historical Special Revenue Fund (SRF) deficits and drive \$72 million in run-rate savings by FY2023.

Agency Efficiencies (*Chapter 12*). A new model for government operations will “right-size” the Government through agency consolidation and reduction and/or elimination of government services. It includes comprehensive reform initiatives in the Departments of Education, Health, Public Safety, Corrections, Hacienda / OCFO, and Economic Development, as well as consolidations and reductions within the long tail of other agencies. Agency efficiency measures must result in \$1,576 million in run-rate savings by FY2023.

Healthcare Reform (*Chapter 13*). Healthcare measures seek to reduce the rate of healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality relative to cost, and must result in \$839 million in run-rate savings by FY2023, projected to grow with healthcare inflation.

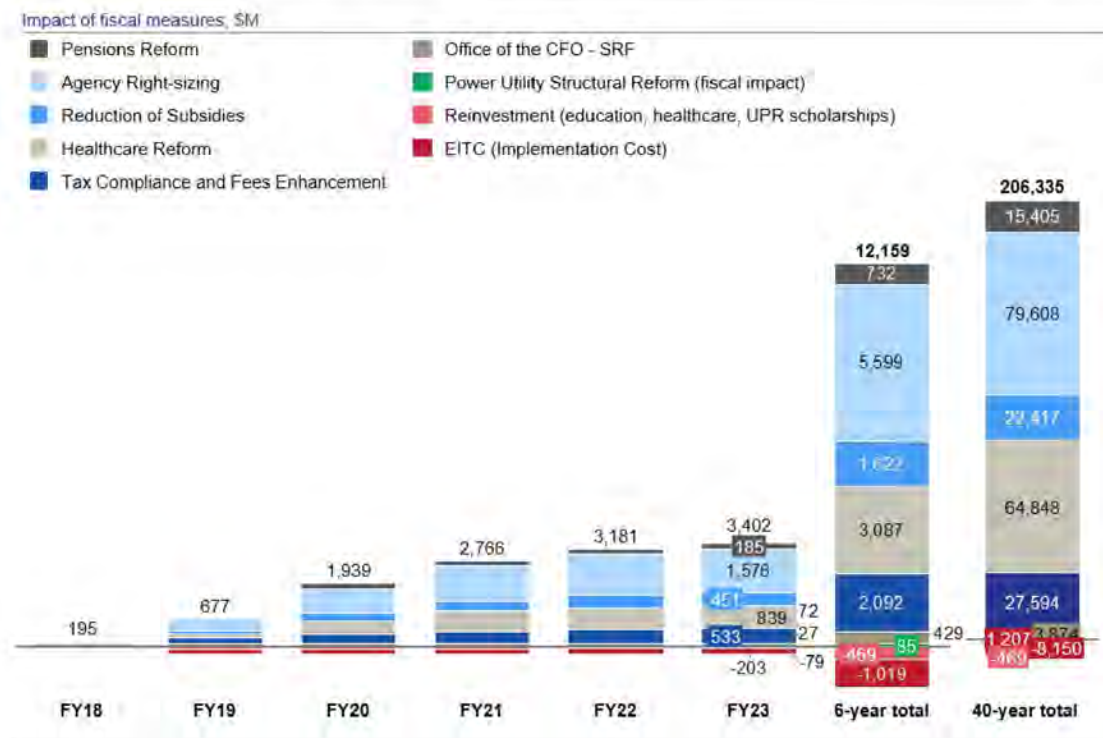
Tax Compliance and Fees Enhancement (*Chapter 14*). Tax compliance initiatives involve employing technology and other innovative practices, as well as implementing new taxes, to capture revenue from under-leveraged sources. These initiatives must increase run-rate revenues by \$533 million by FY2023.

Reduction of Appropriations (*Chapter 15*). The central Government will decrease appropriations granted to municipalities and UPR, which must result in \$451 million in run-rate savings by FY2023.

Pensions Reform (*Chapter 16*). Improvements to the financial stability of public employees’ retirement funds must result in \$185 million of run-rate savings by FY2023.

Together, these measures are crucial to the structural balance of Puerto Rico’s economy, and are projected to result in over \$206 billion over the next 40 years (**Exhibit 34**).

EXHIBIT 34: SAVINGS AND INCREASES IN REVENUES DUE TO IMPACTS FROM FISCAL MEASURES



Chapter 11. OFFICE OF THE CFO⁷²

One of the highest priorities of the Government transformation will be the implementation of the transformed Office of the CFO. Despite attempts to better coordinate Puerto Rico's fiscal functions through Executive Orders OE-2013-007 and OE-2017-033, among other actions, the Government's current financial management functions remain decentralized, fragmented, obsolete, and in need of improvement. This must be solved by the establishment of a strong, centralized Office of the Chief Financial Officer for Puerto Rico ("OCFO"), as proposed by the Governor, into the executive branch of Government.

By centralizing all financial management functions, the OCFO will improve fiscal governance and forecasting, increase transparency, substantiate accountability, heighten internal controls, and improve stakeholder confidence in Puerto Rico's financial management. Most importantly, it will enable the Government to achieve fiscal responsibility and restore access to the capital markets, two cornerstones of PROMESA.

Core objectives of the OCFO must be as follows:

- A) Centralize treasury and liquidity management
- B) Enhance budget development process and improve monitoring / performance tracking

⁷² Although the FOMB does not consider and has not considered anything in the New Fiscal Plan as a "recommendation" pursuant to Section 205(a), to the extent that the Government of Puerto Rico considers or has considered anything in this Chapter a "recommendation" pursuant to Section 205(a), the FOMB hereby incorporates it into the New Fiscal Plan pursuant to Section 201(b)(1)(K).

- C) Drive standardization and integration of financial IT systems
- D) Ensure compliance with procurement, contracts, pensions, and human resources management policies
- E) Reduce special revenue funds deficits through enhanced control mechanisms and oversight
- F) Improve timeliness of CAFR (Comprehensive Annual Financial Report) and financial reporting
- G) Centralize and validate management of funds, debt, and other financial transactions

11.1 Responsibilities and actions of the OCFO

11.1.1 Responsibilities

To carry out the above objectives, the OCFO must be endowed with the following responsibilities:

- The OCFO shall act as the central authority over finance, budget, HR, audit, procurement, cash management, and debt issuance for all entities that receive support from the General Fund or otherwise depend on the Government's taxing authority
- The OCFO shall have the ability to remove any fiscal officer for violations of, or non-compliance with, the law, including failure to provide timely and accurate fiscal and financial information
- The OCFO shall oversee the transition to modified accrual accounting standards

To enable this level of centralized control, these functions must be consolidated under a single individual. The Governor has proposed that this person be the Chief Financial Officer, who will oversee the OCFO/Hacienda. Other offices can be merged into Hacienda and subsequently eliminated to create Hacienda / OCFO. These agencies include, but are not limited to: Treasury (consolidated, not eliminated), OMB, GDB⁷³, AAFAF, OATRH, and GSA. All other fiscal functions of any departments, agencies, and instrumentalities that receive support from the General Fund or otherwise rely on the Central Government's taxing authority would all fall under the OCFO's authority.

A) Centralize treasury and liquidity management

- Enforce and manage a consolidated treasury single account for the Government; this involves consolidating visibility and control of all Government bank accounts, including CU accounts at private banks and creating a true Treasury Single Account. All other public entities should maintain zero balance sweep accounts
- Serve as the sole authority for new bank account creation and closure, as well as ongoing and ad-hoc liquidity reporting, monitoring and analysis. It must rationalize this bank account portfolio, optimize cash pooling/daily cash sweeps and treasury operations, and implement uniform accounts payable and disbursement prioritization policies, processes and reports

B) Enhance budget development process and improve monitoring and performance tracking

⁷³ Scheduled to be liquidatd

- Comply with the recently established Oversight Board budget guidelines and timeline to develop a budget that is consistent with the New Fiscal Plan and easily traceable to the New Fiscal Plan and the audited financials
- Forecast and managing receipts seasonality
- Oversee all tax decrees and tax agreements issues
- Operationalize the budget in the financial system to ensure consistency between accounts and facilitate monitoring of those accounts
- Estimate, protect, and enhance collections and revenue streams, and establish budgetary priorities and oversight, including effective expense controls and procurement reform

C) Drive standardization and integration of financial IT systems

- Drive the comprehensive upgrade and standardization of accounting and IT systems across all agencies

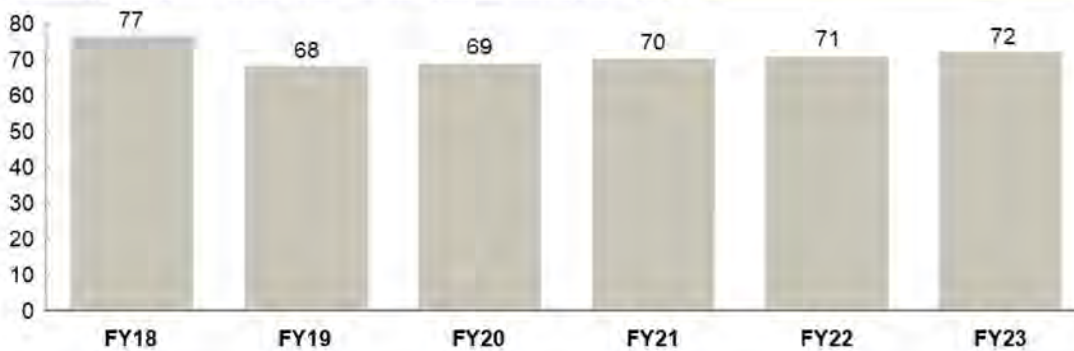
D) Ensure compliance with procurement, contracts, pensions, and human resources management policies

- Certify all contracts, bills, invoices, payrolls, and other evidences of claims, demands or charges related to the central Government and all entities reliant on the Government's taxing authority, including prescribing forms of receipts, vouchers, bills and claims to be used by all agencies
- Manage centralized insurance procurement and policy management
- Oversee human resources as well as all governmental payroll operations and all government-related financial transactions. The office must have the sole responsibility within the Government for reforming personnel policies, including the renegotiation of existing collective bargaining agreements ("CBAs") consistent with the New Fiscal Plan objective to achieve budget savings and efficiencies and enhanced delivery of governmental services and be the one to negotiate all future CBAs to achieve the same ongoing results
- Implement uniform time and attendance processes, and payroll controls and reporting

E) Reduce special revenue fund deficits through enhanced control mechanisms and oversight. Implement an additional measure to ensure responsible stewardship of Puerto Rico's SRF. Additionally, all dedicated revenue streams attributable to SRF must have their funds first deposited in the newly established Treasury Single Account. In this process, it will ensure a balance between current SRF revenues and expenses to align with the legislative mandate that SRFs cannot outspend their resources (**Exhibit 35**).

EXHIBIT 35: SAVINGS GENERATED FROM ELIMINATION OF SPECIAL REVENUE FUND DEFICIT

Summary of special revenue funds deficit reduction measure impact, \$M



F) Improve timeliness of CAFR and financial reporting

- Establish a clear timeline to publish the FY2015, FY2016, and FY2017 CAFRs and manage it to completion as soon as possible
- Implement a new process for the publishing of the FY2018 and subsequent CAFRs within the established regulatory timeframes, and drive improvements in the process and quality of the data provided. All releases should implement the modified-accrual basis of accounting as required in PROMESA and leverage the new forecasting, e-settlement, and analytics capabilities to support all OCFO functions
- Enact measures implementation impact forecasting and reporting
- Supervise property tax assessment reforms, preparing tax maps, and providing notice of taxes and special assessments

G) Centralize and validate management of funds, transactions, and other financial transactions

- Maintain custody of all public funds, investments, and cash. It must administer cash management programs to invest surplus cash
- Facilitate long-term and short-term borrowing programs
- Maintain control and accountability over all funds, property, and other assets controlled or managed by the Government, and oversee all tax decrees and tax agreements issued
- Publish an annual Tax Expenditure Report that identifies and quantifies all tax expenditures (including all tax exclusions, exemptions, adjustments, deductions, subtractions, credits, abatements, deferrals, rebates and special rules.)

11.2 Implementation and enforcement plan

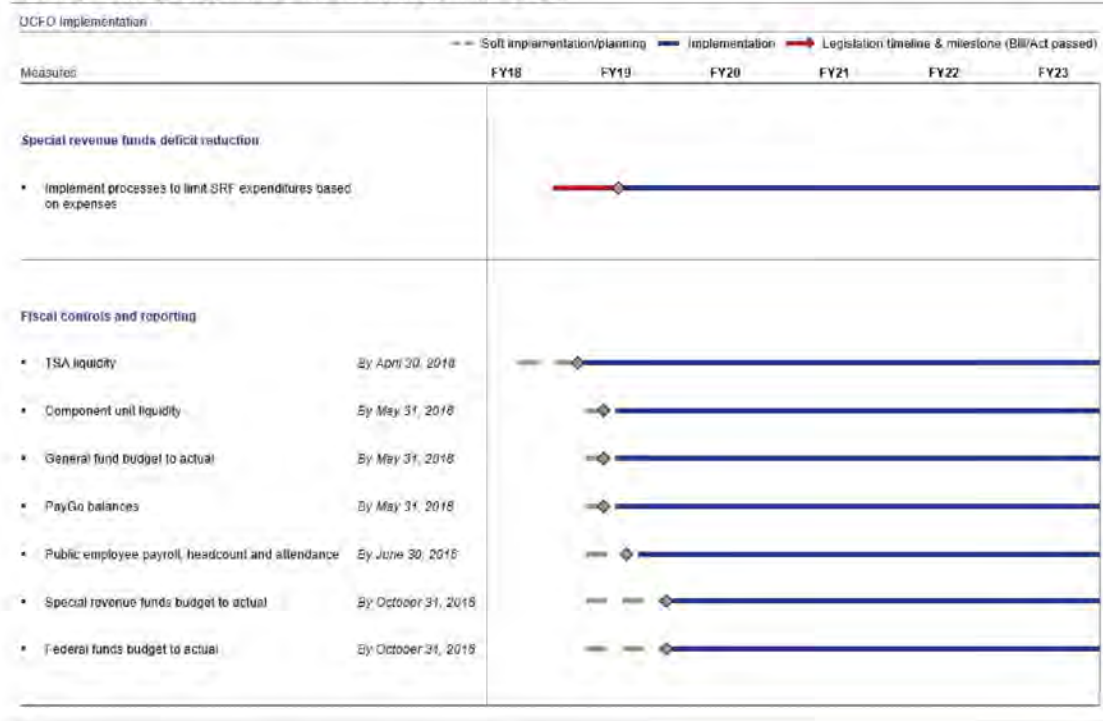
While Executive Orders can facilitate some of the initial reforms required, the OCFO's authorities should ultimately be established through a comprehensive statutory overhaul. Such legislation must conform to the New Fiscal Plan and PROMESA.

As part of the implementation of the OCFO, public reporting of the Government's data regarding finances and budget will be critical to improve fiscal governance, accountability, and internal controls. On a monthly basis, the Government must report publicly on data through the close of the prior month (e.g., April 30th report includes data through March 31st). In

addition, Government contracts and change orders in their entirety shall be publicly available online on the Comptroller's website beginning on September 30th, 2018.

Implementation of measures – and the required timeline for fiscal reporting – under the stewardship of the OCFO will be as shown below (**Exhibit 36**).

EXHIBIT 36: OCFO IMPLEMENTATION TIMELINE



11.2.1 Enforcement of the budget

The budget is an important tool that ensures the New Fiscal Plan targets can be achieved. As a result, the following items represent requirements to ensure the budget is a robust document for driving change.

- The Department of the Treasury will remit to the Legislative Branch and its components, to the Judiciary, to the University of Puerto Rico, and to the non-profit entities that receive funds from this Resolution, monthly and in advance, the budgetary allotments corresponding to one twelfth of the annual allocation provided in the budget resolution for each entity. Such one-twelfth monthly allocation to each entity (except with respect to the Judiciary) shall be subject to the five percent (5%) withholding during the first three quarters of this fiscal year.
- The Director of the Office of Management and Budget (“OMB”) may authorize the disbursement of up to ninety-five percent (95%) of each appropriation during the first three quarters of this fiscal year. The Director of OMB shall withhold the remaining five percent (5%) of each appropriation until after the end of the third quarter of this fiscal year. Such withheld percentage of each appropriation shall only be disbursed during the fourth quarter of this fiscal year if the first 6 months of actual revenues reported to the Oversight Board reach the Government’s monthly revenue projections for that period and subject to the prior approval of the Director of OMB. If actual revenues for the first 6 months of the fiscal year fail to reach the Government’s monthly

revenue projections for that period, the amount of the withheld percentage of each appropriation that may be encumbered shall be reduced proportionally according to the negative budget variance between projected and actual revenues.

- No later than 45 days after the closing of each quarter of a fiscal year, the Secretary of Treasury shall revise the projected net revenues of the General Fund for the current fiscal year (the “Quarterly Revision”) and notify the revision to the Director of the OMB, the Governor and the Oversight Board. The Quarterly Revision shall project future revenues based on actual revenues, and include revisions to the assumptions used to generate the General Fund’s net revenue projections.
- All appropriations authorized in any prior fiscal year payable from the General Fund, including appropriations without a specific fiscal year, are hereby eliminated and no disbursement of public funds may be covered by such appropriations, except: (1) appropriations without a specific fiscal year to carry out permanent improvements that have been accounted for and kept on the books; and (2) the portion of the appropriations authorized for fiscal year 2018 that have been encumbered on or before June 30, 2018, which shall be kept in the books for 60 days after the termination of fiscal year 2018 and after those 60 days no amount shall be drawn against such portion for any reason. This restriction on the use of appropriations of prior fiscal years shall not apply to: (1) programs financed in whole or in part with federal funds; or (2) orders by the United States district court with jurisdiction over all matters under Title III of PROMESA.
- Any power of OMB, the Fiscal Agency and Financial Advisory Authority (“AAFAF”, by its Spanish acronym) or the Department of the Treasury, including the authorities granted under Act 230-1974, as amended, known as the “Puerto Rico Government Accounting Act” (“Act 230”), to authorize the reprogramming or extension of appropriations of prior fiscal years is hereby suspended. Notwithstanding this section, the appropriations approved in the budget certified by the Oversight Board may be modified or reprogrammed with the approval of the Oversight Board.
- In conjunction with the reports that the Governor must submit to the Oversight Board no later than 15 days after the last day of each quarter of the fiscal year pursuant to section 203 of PROMESA, the Executive Director of AAFAF and the Director of the OMB will certify to the Oversight Board that no appropriation of any previous fiscal year (except for appropriations covered by the exceptions authorized in the budget) has been used to cover any expense
- As requested by the Governor, the Fiscal Plan includes the enrollment of police under the age of 40 in Social Security beginning in FY19 instead of FY20, once necessary changes to their pension programs have been implemented. The appropriation in the amount of \$37.4 million included in the Fiscal Plan shall remain unencumbered and under the custody of OMB until police officers under the age of 40 are covered by Social Security in accordance with Section 16.2.3 of the New Fiscal Plan for Puerto Rico certified by the Oversight Board, including: (i) implementation of a defined contribution retirement plan for police officers; (ii) an employee contribution of not more than 2.3% for police officers under the age of 40 as of June 30, 2018 or hired after such date; and (iii) the Social Security Reserve funds are only used to cover the employer’s share of the Federal Insurance Contributions Tax (FICA) that corresponds to the police officers enrolled in Social Security. When the aforementioned conditions are satisfied, OMB shall transfer the Social Security Reserve to the Department of Public Safety.
- The emergency reserve in the amount of \$130,000,000 (the “Emergency Reserve”), required by the New Fiscal Plan certified by the Oversight Board in the custody of the OMB established in the budget resolution, may not be used to cover any allocation or expense whatsoever without the approval of the Oversight Board.

- In conjunction with the reports that the Governor must submit to the Oversight Board not later than 15 days after the last day of each quarter of the fiscal year according to Section 203 of PROMESA, the Executive Director of AAFAF and the Director of OMB will certify to the Oversight Board that no amount of the (i) Social Security Reserve or (ii) Emergency Reserve has been used unless the Executive Director of AAFAF and the Director of OMB certify to the Oversight Board that the corresponding conditions described in above have been satisfied.
- As a rule, necessary for the responsible disbursement of budgetary allocations for operating and other expenses, during the term of the budget resolution, OMB may withhold from any of the allocations to the agencies of the Executive Branch the amounts necessary to pay for the pay-go contribution, unemployment insurance, or taxes withheld from their employees, when OMB determines that such a withholding is necessary to ensure compliance with these obligations by the agencies concerned. Any such amounts withheld by OMB shall solely be reprogrammed to pay the corresponding outstanding obligations related to paygo contributions, unemployment insurance, or taxes withheld from employees.
- The public agencies and instrumentalities, public corporations, and municipalities, with the approval of the Office of Management and Budget, in accordance with current legislation, are authorized to formalize agreements with the Federal Government, other public agencies and instrumentalities, public corporations, or municipalities for the rendering of services based on contracts or the matching of municipal funds and those included in the budget resolution.
- The Office of Management and Budget and the Department of the Treasury are authorized to establish the necessary mechanisms to ensure that when implementing the concept of mobility, pursuant to the provisions of Law 8-2017, as amended, known as the “Puerto Rico Human Resources Management and Transformation in the Government Act,” the corresponding transfer of funds allocated to payroll and related costs of said employee are to be carried out simultaneously.
- On or before August 1, 2018, the Government, in conjunction with the Oversight Board, will develop a work schedule for the Government to present and certify to the Oversight Board: (1) monthly reports of actual cash revenues, actual cash expenses, and cash flow for each government agency; (2) monthly and quarterly reports detailing actual versus projected budget results of each government agency based on a modified accrual basis as well; (3) monthly and quarterly reporting on central government payroll, headcount and attendance, third party accounts payable, invoice processing key performance indicators, tax credits, disaster-related funding and paygo; (4) monthly monitoring by each government agency of key performance indicators for each of the fiscal reform measures; and (5) quarterly reports on macroeconomic performance. Notwithstanding the foregoing, during the period in which the above work schedule is developed, the Government will present and certify to the Oversight Board all reports on liquidity or expenses that it can generate based on available financial information. The reports required under this Section are in addition to the reports that the Governor must submit to the Oversight Board under Section 203 of PROMESA.
- If during the fiscal year the government fails to comply with the liquidity and budgetary savings measures required by the New Fiscal Plan for Puerto Rico certified by the Oversight Board, the Government shall take all necessary corrective action, including the measures provided in PROMESA sections 203 and 204.
- The Secretary of Treasury, the Treasurer and Executive Directors of each agency or Public Corporation covered by the New Fiscal Plan for Puerto Rico certified by the Oversight Board, and the Director of the OMB shall be responsible for not spending or encumbering during fiscal year 2019 any amount that exceeds the appropriations authorized for such year. This prohibition applies to every appropriation set forth in the budget resolution, including appropriations for payroll and related costs. Any

violation of this prohibition shall constitute a violation of the budget resolution and Act 230-1974.

- On or before July 31, 2018, the Director of OMB shall submit to the Oversight Board a copy of the budget certified by the Oversight Board in the budget format managed by OMB known as the “Sabana file”. The Sabana file shall be in Excel and identify both the General Fund budget and non-General Fund budgets within the Government’s PRIFAS and other accounting systems, including detailed budget appropriations and allocations by agency, instrumentality, public corporation, fund type and concept of spend.
- For the avoidance of doubt, any reference within the budget to AAFAF, the Department of Treasury, or OMB, or any of their respective officers, shall apply to any successor thereof.
- The budget resolution shall be adopted both in English and Spanish. If in the interpretation or application of the resolution any conflict arises as between the English and Spanish texts, the English text shall govern.
- If any clause, paragraph, subparagraph, sentence, word, letter, article, provision, section, subsection, title, chapter, subchapter, heading, or part of the budget resolution is annulled or declared unconstitutional, the resolution, decision, or judgment entered to that effect will not affect, harm, or invalidate the remainder of the resolution. The effect of such judgment will be limited to the clause, paragraph, subparagraph, sentence, word, letter, article, provision, section, subsection, title, chapter, subchapter, heading, or part thereof that has been annulled or declared unconstitutional. If the application to a person or circumstance of any clause, paragraph, subparagraph, sentence, word, article, provision, section, subsection, title, chapter, subchapter, heading, or part of the resolution is invalidated or declared unconstitutional, the decision, opinion, or judgment entered to that effect will not affect or invalidate the application of the remainder of the resolution to those persons or circumstances in which it can validly apply. It is the express and unequivocal will of this Legislature that the courts enforce the provisions and the application of the resolution to the greatest extent possible, even if any of its parts is set aside, annulled, invalidated, prejudiced, or declared unconstitutional, or even if its application to any person or circumstance is annulled, invalidated, or declared unconstitutional. This Legislature would have approved the resolution regardless of the finding of severability that the Court may make.
- The Director of OMB, the Secretary of Treasury, the Executive Director of AAFAF, and any successor thereof, shall each be responsible for enforcing compliance of the budget as certified by the Oversight Board. For the avoidance of doubt, such government officials shall each be responsible for complying with the accountability controls existing under Puerto Rico law as of the date hereof, including Act 230-1974, as amended, known as the Puerto Rico Government Accounting Act.
- On or before July 31 of each year, the Governor shall provide to the Oversight Board budget projections of revenues and expenditures for each quarter of a fiscal year, which must be consistent with the corresponding budget certified by the Oversight Board (the “Quarterly Budget”). The Quarterly Budget shall be provided to the Oversight Board in Excel format and include detailed allocations by agency, public corporation, fund type and concept of spend. Together with the report that the Governor must provide under Section 203 of PROMESA not later than 15 days after the last day of each quarter, the Governor shall provide a quarterly variance analysis that is consistent with modified accrual accounting.

Chapter 12. AGENCY EFFICIENCIES⁷⁴

12.1 Changes to agency operational expenditures

The Government has approximately ~116,500 employees⁷⁵ across 114 Executive Branch government agencies, as well as agencies within the Legislative and Judicial branches (excluding large instrumentalities, e.g., PREPA, PRASA, HTA UPR, COSSEC, GDB)⁷⁶. With a total FY2018 budget of over \$8.6 billion, these agencies now utilize **personnel and non-personnel resources that are outsized compared to the actual service needs of the people of Puerto Rico**. Compared with states serving similar populations, Puerto Rico remains an outlier in terms of sheer number of agencies: for example, Iowa has only 36 state agencies and Connecticut has 78. In addition, there are countless examples of **subpar service delivery** across the Government. For instance, despite having 5+ agencies primarily dedicated towards the financial stewardship of the Island, the Government has been unable to report consistently accurate financial statements on a timely basis. In addition, Puerto Rico's education system has consistently delivered unsatisfactory student outcomes, including below-U.S. mainland graduation rates and standardized test scores are far below basic proficiency.

The level of governmental spending in Puerto Rico has not seen any significant decline in recent years even though Puerto Rico's population fell by 12% from 2007 to 2017 (prior to Hurricanes Irma and Maria)⁷⁷. In fact, **Puerto Rico remains an outlier in terms of the number of citizens employed by the state government**, with between 25-30% of those currently employed working for the government (e.g., in a "governmental position")⁷⁸, which places Puerto Rico in the top 10th percentile of U.S. states for public sector employment⁷⁹.

Therefore, the right-sized Government of the future should wherever possible reflect mainland U.S. benchmarks in terms of both number of agencies and size of agencies themselves to **deliver services in as efficient a manner as possible**. As part of the Governor's new Government model, the Government should **consolidate the 114 agencies into 22 groupings and a number of independent agencies**.⁸⁰ In some cases, the consolidations are designed to better focus the competing efforts of multiple agencies, such as the Economic Development grouping which will consolidate ten agencies into one. In other cases, the consolidations should serve to move services closer to citizens, such as the Healthcare and Social Services groupings which will consolidate access points to important services like Medicaid. Furthermore, in cases where agencies will be left independent, fiscal measures will be applied to improve the quality of the underlying services, especially in the case of PRDE.

In **Exhibit 37**, total savings from agency-specific personnel and non-personnel measures are shown, as well as Government-wide compensation-related measures which will ensure

⁷⁴ Although the FOMB does not consider and has not considered anything in the New Fiscal Plan as a "recommendation" pursuant to Section 205(a), to the extent that the Government of Puerto Rico considers or has considered anything in this Chapter a "recommendation" pursuant to Section 205(a), the FOMB hereby incorporates it into the New Fiscal Plan pursuant to Section 201(b)(1)(K)

⁷⁵ Excludes transitory employees

⁷⁶ Excludes agencies which currently have \$0 operating budget and no employees

⁷⁷ United States Census Bureau

⁷⁸ Puerto Rico Economic Analysis Report 2015-2016 (PR Department of Labor and Human Resources)

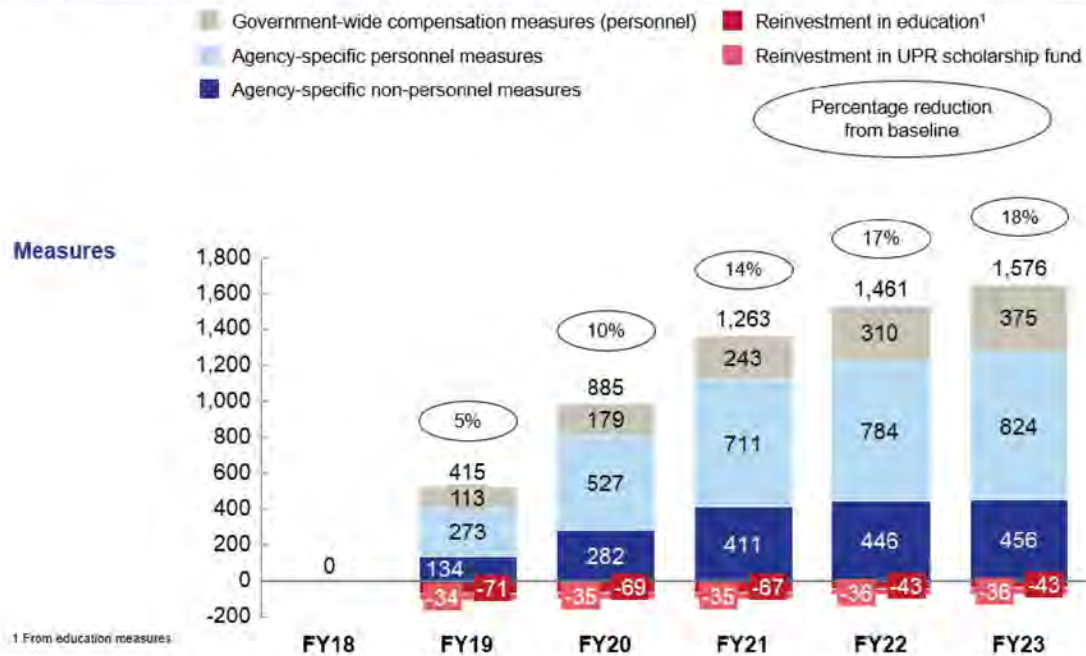
⁷⁹ Gallup, "Gov't. Employment Ranges from 38% in D.C. to 12% in Ohio"

⁸⁰ To date, 18 agencies have not yet been allocated within individual groupings. The Government proposes that these agencies will either remain independent or fit in within one of the existing 23 groupings so as to limit the total number of agencies to no more than 35

properly-resourced compensation through continuing a payroll freeze and standardizing healthcare benefits.

EXHIBIT 37: SUMMARY OF AGENCY EFFICIENCIES IMPACT

Savings from agency efficiencies measures, \$M



12.2 Approach to agency efficiency measures

There are several actions that have been applied to each agency to achieve these targets:

- **First, some agencies will be closed completely** if their function and programs are not required, resulting in a 100 percent personnel and non-personnel savings for all non-Federal funded expenditures after a 2-3-year wind-down period (a minimum of 50% savings must be achieved no later than year 2).
- **Other agencies must be merged** when benchmarking and best practices determine that activities across agencies could be better served through a single mission and management to eliminate redundancies, and/or where economies of scale make shared services more economical without reducing quality of service.
- **A small subset of agencies will be left independent but made more efficient** through a series of streamlining efforts related to both personnel and operations, allowing the agency to provide existing services at a lower cost to taxpayers.

Exhibit 38 shows the future agency groupings and potential independent agencies proposed by the Government.

EXHIBIT 38: OVERVIEW OF NEW AGENCY GROUPINGS

Future state agency groupings:		Agency grouping either still to be determined, or agency expected to remain independent	
1	Agriculture (3 agencies)	23	Citizen's Advocate Office (Ombudsman)
2	Automobile Accident Compensation Administration (1 agency)	24	Civil Rights Commission
3	Corrections (2 agencies)	25	Commonwealth Election Commission
4	Culture (3 agencies)	26	Convention Center District Authority
5	Economic Dev. (11 agencies)	27	Cooperative Development Commission
6	Education (1 agency)	28	Department of Consumer Affairs
7	Environmental (4 agencies)	29	Department of Sports and Recreation
8	Executive Office (8 agencies)	30	Gov't Employee and Judiciary Retirement System Administration
9	Finance Commission (2 agencies)	31	Horse Racing Industry and Sport Administration
10	Hacienda – OCFO (6 agencies)	32	Industrial Commission
11	Healthcare (7 agencies)	33	Marlin Peña Canal ENLACE Project Corporation
12	Justice (2 agencies)	34	Office of Government Ethics
13	Labor (5 agencies)	35	Office of the Comptroller
14	Land (2 agencies)	36	Office of the Electoral Comptroller
15	Ombudsman (5 agencies)	37	Port of Police Authority
16	Public Safety (6 agencies)	38	Port of the Americas
17	Public Works (4 agencies)	39	Public Broadcasting Corporation
18	Social Welfare (8 agencies)	40	Puerto Rico National Guard
19	State (2 agencies)	41	Special Independent Prosecutor Panel
20	State Insurance Fund Corporation (1 agency)	42	Teacher's Retirement System
21	Universities (2 agencies)		
22	Utilities Commission (4 agencies)		

In addition, the Government proposed 5 agencies for closure: Model Forest; Culebra Conservation and Development Authority; Company for the Integral Development of Cantera's Peninsula; Economic Development Bank; and the Industrial, Tourist, Education, Medical, and Environmental Control Facilities Financing Authority (AFICA).

12.3 Ensuring enforcement of the agency efficiency expenditure reductions

If, after any fiscal quarter the projected agency efficiency savings for any grouping is not realized, the shortfall from that fiscal quarter will be added to the agency efficiency savings target for the corresponding grouping for the following quarter.

The Government shall produce a quarterly performance report, which shall be submitted to the Oversight Board within 45 days of each fiscal quarter end, demonstrating the agency efficiency savings that have been realized, broken down by grouping and broken down between payroll and non-payroll savings, and displaying the performance of the realized agency efficiency savings for each grouping against the projections as set forth herein.

If, based on the quarterly performance reports and any other information the Oversight Board deems appropriate, the Oversight Board concludes there is underperformance in agency efficiency savings for any grouping, **the Oversight Board will take measures to enforce reductions in the amount of unrealized savings** in the following fiscal quarter for the corresponding grouping.

If, after the third fiscal quarter of any fiscal year there remains unrealized agency efficiency savings for any grouping relative to the projected agency efficiency savings in the New Fiscal Plan for the applicable fiscal year, the Oversight Board will automatically reduce the budget

for the corresponding grouping for the following fiscal year in the amount equal to the unrealized agency efficiency savings. In particular, if the Oversight Board determines that there is material underperformance in agency efficiency savings relative to the projections set forth in the New Fiscal Plan, intentional workforce reductions will be necessary to meet the agency efficiency savings targets set forth herein.

As part of the rightsizing effort, **all consolidated agency groupings shall perform a thorough review of the agencies within the grouping and submit a proposal for integration no later than the end of the fourth quarter of FY2018.** The proposal must include a detailed description of changes that demonstrate an ability to hit the fiscal targets articulated for each grouping, which will likely be drawn primarily from the following initiatives: sharing of support services and systems integrations, elimination of duplication (e.g., asset base, contracts, procurement), standardizing organizational structures across agencies, aligning services delivery with citizen needs, and personnel reductions.

The target savings methodologies are organized below (**Exhibit 39**).

EXHIBIT 39: SAVINGS TARGETS FOR AGENCY EFFICIENCIES

Savings targets, % off of baseline

	Closing	Merging	Efficiency
Back-office	100%	40-50%	15-20%
Front-line	100%	Variable	Variable
Non-personnel operations	100%	30%	20%

The New Fiscal Plan recognizes that detailed agency-specific initiatives may require flexibility in which initiatives are applied to which agencies. As a result, the levers outlined above are highlighted as examples to achieve savings through efficiencies rather than directing all initiatives be taken by all agencies.

12.4 Compensation-related initiatives

Instituting a payroll freeze

The Commonwealth Fiscal Plan certified in March 2017 included a measure to freeze all payroll expenses which became law in FY2018. However, the freeze was due to expire at the end of FY2019. To extend the savings from freezing payroll increases, **the freeze must be continued** through the duration of the New Fiscal Plan. This measure should amount to \$262.4 million in annual savings by FY2023.

Standardizing healthcare provided to government employees

Medical insurance is a core benefit provided to all government employees. However, the degree of coverage varies widely across government agencies, with some employees receiving superior coverage compared to their peers. For instance, Port Authority employees receive an

average of \$487 per month in medical benefits, whereas employees of the State Elections Commission receive only \$90 per month⁸¹.

To ensure fairness and reduce expenses, the Government must **standardize the health insurance received by each employee so that everyone receives \$100 worth of benefits per month, or \$1,200 per year**. This initiative must be fully implemented by the start of FY2019, and should lead to \$45.8 million in run-rate savings by FY2023.⁸²

Reducing additional outsized non-salary compensation paid to employees

There are several policies that the Government must continue to enforce through the duration of the New Fiscal Plan that will impact personnel spend. These include:

- Asserting a hiring freeze with stringent requirements for backfilling positions left open by attrition or workforce reduction
- Limiting paid holidays to 15 days annually across all public employees
- Prohibiting carryover of sick and vacation days between fiscal years
- Prohibiting any future liquidation of sick and vacation days
- Eliminating the Christmas bonus for all public employees

The hiring freeze policy is codified as law by the March 2017 Fiscal Plan, and the New Fiscal Plan continues to enforce that policy while requiring the Government to propose stringent requirements for the backfilling of any opened positions for approval to the Oversight Board. The other policy measures outlined above are codified as law in Act 26-2017, except for the elimination of the Christmas bonus.

The fiscal impacts of these policies are captured in the baseline expenditures of the New Fiscal Plan, except for the elimination of the Christmas bonus. These policies must remain in place so as to not increase personnel expenditures for the Commonwealth. The elimination of the Christmas bonus is projected to lead to ~\$67 million in run-rate savings by FY2019.

Total savings from compensation-related measures must reach a run-rate of \$375.0 million per year beginning in FY2023.

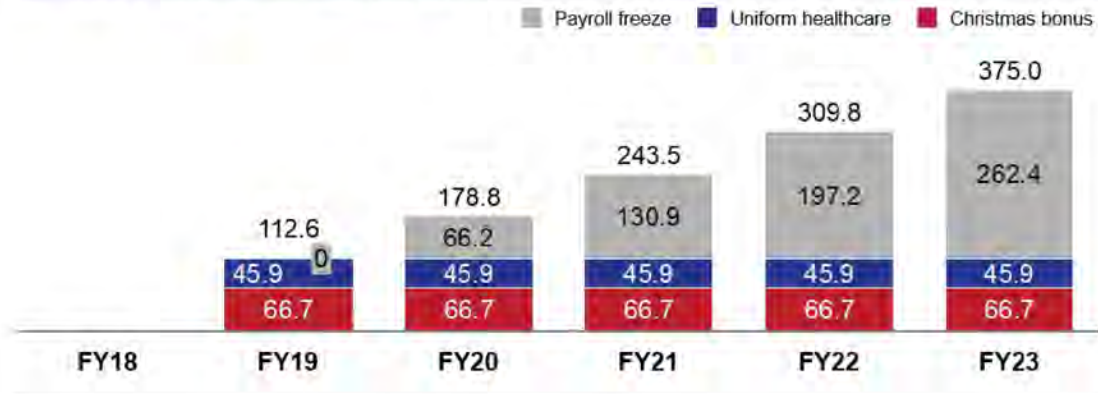
Annual savings targets are summarized below (**Exhibit 40**).

⁸¹ Analysis of active, non-transitory government employees not supported by Federal Funds; data provided within January 2018 Government attrition model

⁸² This total excludes uniform healthcare savings from the PRDE and the DPS, both of which have been calculated independently and included in their respective sections of the New Fiscal Plan

EXHIBIT 40: COMPENSATION-RELATED MEASURES SUMMARY OF IMPACT

Summary of compensation measures impact, \$M



12.5 Department of Education (PRDE)

12.5.1 Current state and future vision for the Department of Education

Throughout the last decade, PRDE has encountered longstanding challenges which have contributed to low academic performance, including bureaucratic hurdles associated with operating as a single local education agency, inability to execute professional evaluations tied to quality outcomes in the classroom, and lack of a cohesive lasting strategy for academic improvement.

In addition, PRDE, the largest agency in the central Government by spend, is outsized relative to need. While student enrollment has declined considerably over the past few decades (over 50% decline since its peak in 1980, and by about 33% in the past decade alone),⁸³ the number of schools and teachers has not decreased proportionally (with only about a 30% reduction in public schools since 1990).⁸⁴ With an expected additional student decline of 14-16% over the next 6 years, PRDE has significant room to right-size its education system relative to number of students. Tightening its system will give PRDE the flexibility and funding to focus on improving the quality of education provided.

To improve the capabilities and capacity of the Puerto Rican population, the Government will need to set high aspirations. PRDE aims to improve student academic achievement by **reducing the achievement gap by 12% annually on Puerto Rico proficiency tests**, achieving 80% proficiency in Spanish, 73% in Mathematics, and 77% in English; and further, improving the graduation rate to 90% by FY2023. This mandate is not easy, but is attainable through a **series of education efficacy and efficiency measures as well as targeted reinvestment in student and teacher outcomes**.

12.5.2 PRDE Efficiency measures

PRDE must achieve \$54 million in net personnel savings and \$7 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue

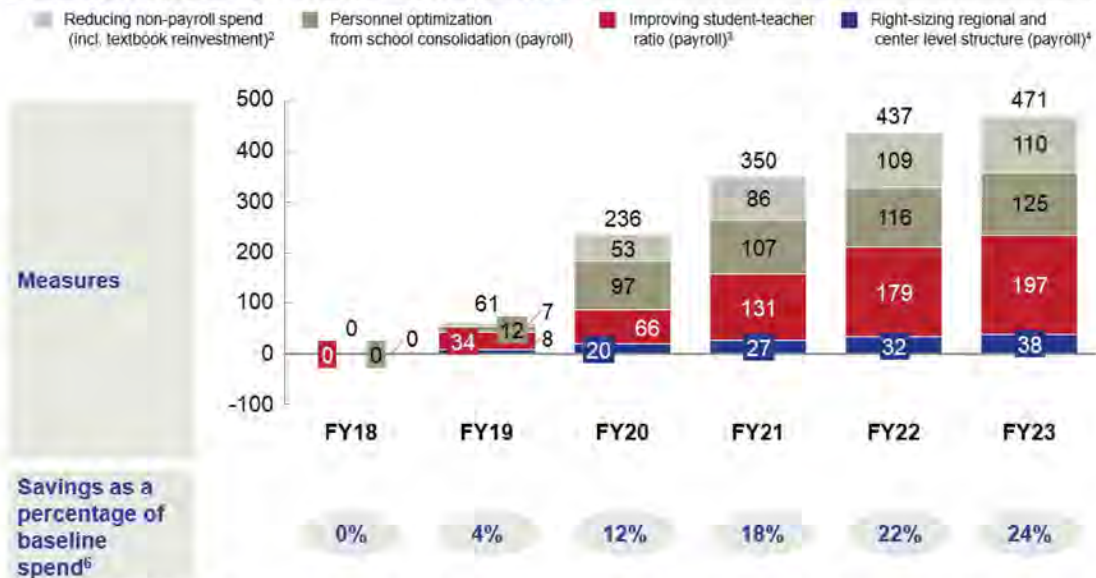
⁸³ Helen F. Ladd and Francisco L. Rivera-Batiz, "Education and Economic Development in Puerto Rico" *The Puerto Rican Economy: Restoring Growth*, Brookings Institution Press, Washington, D.C., 2006, 189-238

⁸⁴ There were 1,619 public schools in 1990 and 1,131 at the time of reporting. Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation," November 30, 2017

Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 41** for annual personnel and non-personnel savings that must be achieved through FY2023. To accomplish this, PRDE could consolidate its footprint (including schools, classes, teachers, and administration), modernize facilities, revise the curriculum, and equip teachers with what they need to succeed. Measures must generate \$471 million in run-rate savings inclusive of funds needed for requisite reinvestments to increase quality.

EXHIBIT 41: EDUCATION RIGHT-SIZING SUMMARY OF IMPACT

Summary of Department of Education measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributable to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below chart.
² Includes school closure implementation costs.
³ Includes teacher and director salary reinvestment as well as all implementation costs.
⁴ Includes director salary increase.
⁵ Includes all general and federal fund payroll and non-payroll expenses. Excludes own income, non-addressable opex (e.g., student food services), and permanent improvements.
⁶ Inclusive of all savings measures over baseline, i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction.

Reducing non-payroll spend through consolidating the K-12 school footprint and procurement

PRDE has closed over 480 schools (30% of K-12 schools) since 1990. After SY2016-17, PRDE closed 167 schools,⁸⁵ and announced plans to close another 283 schools after SY2017-18.⁸⁶ After an analysis of several factors including capacity, geographic and cultural characteristics, distance to neighboring schools, transportation costs, and facility quality, among others, the Government has determined that it will be able to close a total of 307 schools before FY2020, or an additional 24 schools beyond this summer's planned closings, and it must do so. It should target an average capacity of 330 students per school for each primary school and 700 students per secondary school.

Each school closure should save an estimated \$47,000 annually by reduction of facility costs. Consolidation of schools will also enable higher quality outcomes at lower cost by enabling systems to invest in a smaller number of higher-performing schools.

⁸⁵ Puerto Rico Department of Education Report "Schools Closed FY 2017." Accessed January 2018

⁸⁶ Puerto Rico Department of Education Press Release, March 2018

Independent of, but accelerated through, consolidations, PRDE procured spend should be reduced by approximately 10-15% through centralized procurement policies including strategic purchasing and demand controls (*see full set of procurement levers in Section 12.2*).

Personnel optimization from school consolidation

To date, school consolidations have not always led to proportional cost savings because they are often not accompanied with concurrent reductions in staff. Going forward, the number of school staff is expected to decline proportionally to the projected decrease in number of schools. For example, the number of school administration (principals, office staff, etc.), food service staff, facility maintenance staff, and other school-specific staff shall be scaled down accounting for a smaller number of schools. This should result in \$124.8 million in savings by FY2023.

Improving student-teacher ratio

Puerto Rico's student-teacher ratio is currently 11:1, compared to approximately 16:1 in many comparable districts on the mainland such as Miami-Dade County Public Schools in Florida. Puerto Rico's student-teacher ratio will only continue to decrease with the projected student enrollment declines in the coming years. To address this, teacher staffing levels will be reduced to reach a target student-teacher ratio of 14:1. This ratio is slightly smaller than the mainland benchmark due to several constraints specific to Puerto Rico, such as its currently poor student outcomes and its extremely high proportion of special education students. These teacher-focused measures should achieve \$197.2 million in run-rate savings by FY2023, inclusive of transition costs under workforce reduction policies (e.g., liquidation of vacation pay). The savings figure is also reduced to reflect additional investment in increased salary for remaining teachers (detailed below).

Right-sizing regional and center level structure

Rather than function as a single Local Education Agency (LEA), PRDE shall create regional LEAs (**Exhibit 42**).

EXHIBIT 42: LOCAL EDUCATIONAL AGENCIES FUTURE STATE REGIONS



This new regional LEA model will be leaner while also decentralizing the administration of individual schools, putting decisions closer to students and families and improving outcomes. Developing and relying on local leadership must also allow PRDE's central administrative structure to right-size to staffing levels comparable to state educational agencies (SEAs) in comparable mainland U.S. states. Currently, the central administration has one staff per 133 students projected in FY2022; the 50th percentile of U.S. states is a ratio of 1:166. A decentralized model also decreases dependency on the secretary's office for day-to-day decision making, building capabilities of second-line management at the regional level.⁸⁷

Implementing the regional LEA model must allocate administrators more effectively for decision-making. The model shall decrease headcount requirements at the regional level and central level; further, allocation of administrators in less costly regional centers (as opposed to centrally) should enable cost savings on retained positions. Each regional office is expected to have capable leadership and staff to execute core functions, including operations, student services, accountability, and academic standards. This model results in a total of \$37.6 million in run-rate savings each year from less costly regional positions and reduced central staff, while seeking to improve PRDE operations and student outcomes.

12.5.3 Reinvestment in education outcomes

The education of the children of Puerto Rico, and their successful entrance into the workforce, is a core goal of PRDE. Investment in education has also been shown to drive long-term economic growth – and in the case of Puerto Rico is projected to add 0.16% increase in GNP growth by FY2048 and keep growing thereafter (*see Section 4.2 for further discussion of GNP*

⁸⁷ Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation" November 30, 2017

impact). As a result, it is important that some of the savings from education measures are reinvested to drive student and teacher outcomes. PRDE will drive two such initiatives, both funded through reinvesting right-sizing savings:

1. Teacher development and retention
2. New educational materials such as textbooks

Teacher development and retention

Teachers are considered one of the most determinative factors in student success in the classroom and standard of living beyond the classroom. For example, one U.S. study found that classes with an average-quality teacher had a lifetime income of \$266,000 higher than classes with a poor-quality teacher in each year.⁸⁸ Improved education through enhanced teacher quality is critical to the long-term success of the children of Puerto Rico and will help to lift a new generation of Puerto Rican citizens out of poverty. Recognizing this, PRDE has committed to transforming system practices related to attracting, retaining, and developing teachers and administrators:

1. **Providing increased opportunities for and higher quality of training** (e.g., in-class; through leadership academies; STEM development through collaboration with universities)
2. **Creating opportunities for targeted skill development** (e.g., instituting mentorship programs to enable coaching by experienced and high-performing teachers as a cost-neutral, and often high impact, initiative)
3. **Investing in teacher salaries that approach mainland comparators.** Teachers in Puerto Rico have not received a pay raise in nearly a decade, while salaries on the mainland consistently increase in keep up with cost of living. Salaries are significantly lower than mainland comparators, causing Puerto Rico to lose out on opportunities to attract and retain talent in its teacher and administrator positions. The Government will implement a \$1,500 annual salary increase for teachers⁸⁹ and \$23,000 annual salary increase for directors⁹⁰ to begin closing this gap, although the gap remains large, and incentivize retention of highest quality teachers.

These teacher-focused reforms will be funded through reinvestment of right-sizing measures and are factored in to the measures overall savings as described above. Such reforms will have dramatic impact on student outcomes not only in school but beyond, as they enter the workforce and lead a new generation in Puerto Rico.⁹¹

New educational materials including new textbooks

Teachers are currently limited in their ability to provide the best educational opportunities because of the limited resources available, including up-to-date textbooks. Therefore, \$75 per student (FY2019-FY2021) will be invested in procuring new textbooks, or \$21-24 million each

⁸⁸ Raj Chetty, John N. Friedman, and Jonah E. Rockoff, "The Long-Term Impact of Teachers: Teacher Value-Added and Student Outcomes in Adulthood," National Bureau of Economic Research, 2011

⁸⁹ In 2016, mainland U.S. teachers earned an average salary of over \$58,000 (U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, table 6.6D, August 2016). The average salary for a teacher in Puerto Rico (less benefits) is approximately \$32,000 per year. An increase of \$1,500 per year would bring average teacher salary to \$33,500, still approximately 42% lower than the mainland U.S.

⁹⁰ Directors in Puerto Rico currently receive a salary of \$42,000. The mainland benchmark for Elementary, Middle, and High School Principals is approximately \$92,500 per year (Bureau of Labor Statistics 2018). An increase of \$23,000 per year would bring average director salary to \$65,000 in Puerto Rico, still approximately 30% lower than the mainland U.S.

⁹¹ For example, reducing teacher absenteeism, which was found to reduce 4th-graders' math test scores by 3.2% of a standard deviation for every additional 10 days of teacher absence, could create a step change in student proficiency

year as one-time costs. This will be funded through reinvestment of non-payroll savings created by measures, and is factored into the measure savings as described above.

12.6 Department of Health (DOH)

12.6.1 Current state and future vision for the Department of Health

Currently, the Government has several health-related agencies that are highly fragmented: three public corporations, three public hospitals, seven sub-secretaries, six regional offices, and eight program offices administering 64 Federally funded programs — all with their own support functions. Such fragmentation drives up cost and inefficiency, as each agency provides their own human capital management, procurement, and financial support. Citizen experience and care delivery also suffer as Puerto Ricans face multiple handovers of individual cases across frontline staff with fragmented focus.

In the future state, the Governor has proposed that the Department of Health consolidate 7 agencies with centralized support functions: The Department of Health (DOH); Medical Services Administration (ASEM); Health Insurance Administration (ASES); Mental Health and Addiction Services Administration; Puerto Rico and the Caribbean Cardiovascular Center Corporation; Comprehensive Cancer Center; and Center for Research, Education, and Medical Services for Diabetes (**Exhibit 43**). This new DOH should enable efficiencies while maintaining high quality public health. Consolidating these seven agencies should provide opportunity for right-sizing support functions, as well as centralizing procurement to provide savings on costly medical materials and equipment.

EXHIBIT 43: AGENCIES INCLUDED IN FUTURE STATE DOH

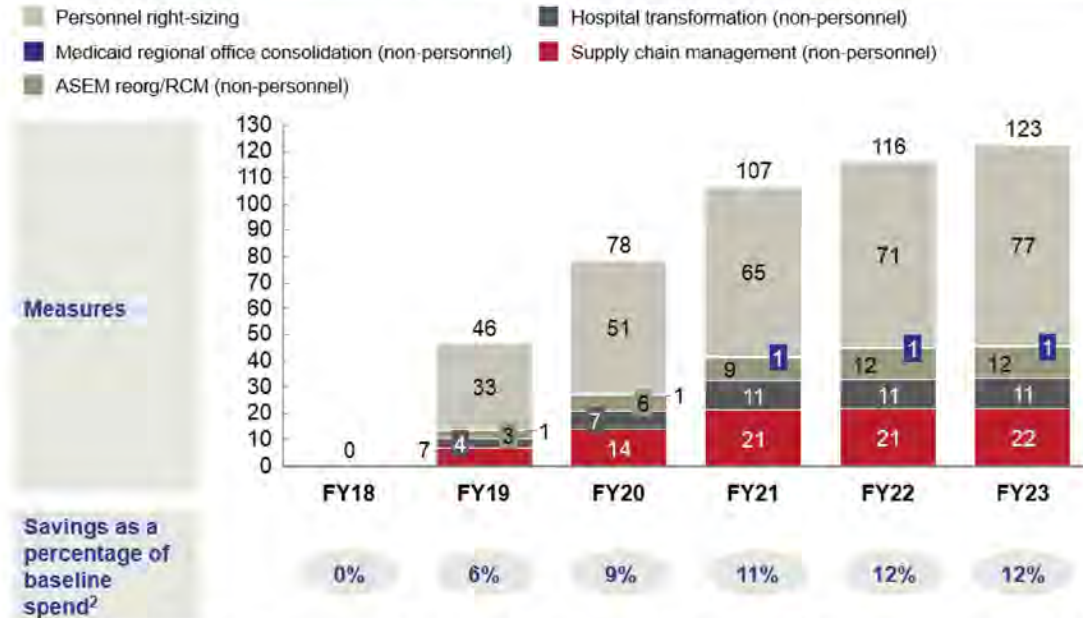
1 Department of Health	5 Comprehensive Cancer Center
2 Health Insurance Administration (ASES)	6 Mental Health and Addiction Services Administration
3 Medical Services Administration (ASEM)	7 Puerto Rico and the Caribbean Cardiovascular Center Corporation
4 Center for Research, Education and Medical Services for Diabetes	

12.6.2 Efficiency measures for the Department of Health

By bringing together seven major agencies to create the Department of Health (DOH), the Government must take advantage of personnel and non-personnel savings that can be achieved through consolidation. DOH must achieve \$33.1 million in personnel savings and \$13.3 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit. Refer to **Exhibit 44** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 44: DEPARTMENT OF HEALTH RIGHT-SIZING SUMMARY OF IMPACT

Summary of Department of Health measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below graph.
² Inclusive of all savings measures over baseline, i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

Personnel optimization and centralization

The Government should centralize and consolidate support functions, including finance, HR, legal, revenue cycle management, procurement, grants management, and epidemiology. Improved management and oversight of these functions, and workforce reductions associated with consolidation, must result in \$76.9 million in run-rate personnel savings by FY2023.

ASES and Medicaid consolidation and optimization

Medicaid currently has 85 offices across 78 municipalities that can be consolidated into fewer, more strategic locations. Reducing the Medicaid office and regional hospital office structure will eliminate duplication of effort and redundancies –and allow the Department to provide more robust services at convenient locations. In addition, ASES will redesign the Medicaid eligibility and enrollment process (web based, MCO dependent, hospital responsibility, etc.) and encourage online services to improve data management. Best practices from the mainland include engagement of third-parties within hospitals to identify and enroll eligible patients into the Medicaid program.

Consolidation of regional centers and Medicaid optimization should result in \$500,000 in run-rate savings by FY2023.

Supply chain management

Due to the large volume of spending on procuring medical supplies and equipment, and the high cost of such materials, there is a significant opportunity to improve procurement efficiency through best practice supply and demand management, and better employing economies of scale. In FY2018, there was over \$188 million in addressable non-payroll spending (excluding any hospital expenses) across all agencies. This measure to reduce non-

payroll spend through procurement efficiency could amount to \$22 million run-rate savings by FY2023.

Hospital management transformation

In addition to other agencies' non-payroll savings, hospital transformation will likewise seek to improve procurement savings specifically for hospitals and health systems, which will focus on commodity standardization and sourcing, indirect spending (analyzing insourcing vs. outsourcing opportunities), and physician preference item optimization.

Holistic hospital transformation efforts should also reduce payroll spend through clinical labor optimization, which is captured in the "personnel optimization" measure. For example, wages should be optimized to fair market value to reduce turnover and therefore temporary/overtime spend; and role/responsibilities should be optimized to skill level and wage rate. This measure would result in \$11 million in run-rate savings by FY2023.

Restructuring ASEM and Revenue Cycle Management

ASEM is a public corporation originally created to serve as a central procurement office for government hospitals to create economies of scale for medical supplies, devices, and services. Throughout the years, rates, salaries, and services have increased at a higher rate than within the broader industry, and procurement processes have decentralized across the hospitals ASEM was created to serve.

The focus areas of this measure include: 1) Establishing a centralized Medical Center including ASEM, University, Pediatric and Cardiovascular hospitals; 2) Identifying and establishing key hospitals across the Island; 3) Designing and implementing a referral system among key hospitals and clinics; and 4) Establishing a physician network. Improvements will be made to personnel, process, and technology. This measure would result in \$12 million of run-rate savings by FY2023.

12.7 Department of Public Safety (DPS)

12.7.1 Current state and future vision for DPS

The Department of Public Safety (DPS) is an agency grouping which was approved by Puerto Rico's Legislature in 2017 (Act 20), and includes six agencies responsible for **ensuring the safety and security for all residents of the Island**. The grouping includes the following agencies:

EXHIBIT 45: LIST OF AGENCIES IN DPS GROUPING

1 Puerto Rico Police Department (PRPD)	4 Emergency Management and Disaster Administration Agency
2 Firefighters Corps	5 9-1-1 Services Governing Board
3 Emergency Medical Services Corps	6 Institute of Forensic Sciences

The largest agency by spend and personnel is the Police Department (~85% of total DPS spend). As a result, most of measures identified within the grouping apply to the Puerto Rico Police Department (PRPD).

One of the PRPD's main responsibilities is to manage violent crime, defined by the FBI as "murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault."⁹² Puerto Rico's current level of violent crime is 7,643 crimes per year, based on FBI reporting

⁹² <https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime>

from 2016. However, **Puerto Rico currently spends more on police per violent crime than most U.S. states**, even after adjusting for differences in PPP; while the PRPD spends \$97,939 per violent crime, the U.S. 50-state median level of spend is only \$88,905.

This elevated spend is partially because **the rate of violent crime in Puerto Rico has been decreasing for the past 10 years without a simultaneous decrease in police officers**. While there was an average of 258 incidences of violent crime per 100,000 citizens between 2007 and 2011, the rate of crime decreased to 242 per 100,000 between 2012 and 2016. This decline likely continues into 2018, despite reports of a substantial uptick in crime following Irma and Maria. These contentions have been extrapolated from limited data collected following the Hurricanes. For instance, widespread headlines referring to an 100% increase in murder rates in Puerto Rico after the storm were drawn from only an 11-day window at the start of 2018⁹³. Furthermore, academic studies on crime following natural disasters find no empirical evidence of large, sustained elevations in violent crime, outside of some upticks in domestic and spousal abuse⁹⁴.

It is thus the time to take a closer look at the PRPD, not only due to the elevated spend and diminished violent crime rate, but also in conjunction with a 2013 consent decree agreement with the U.S. Department of Justice on reform measures, which compelled the PRPD to conduct a staffing allocation and resources study to assess the proper size of the police force. **The Department is currently undergoing a transformative process to address the requirements under the agreement**, and the measures within the New Fiscal Plan will complement these efforts.

12.7.2 Efficiency measures for DPS

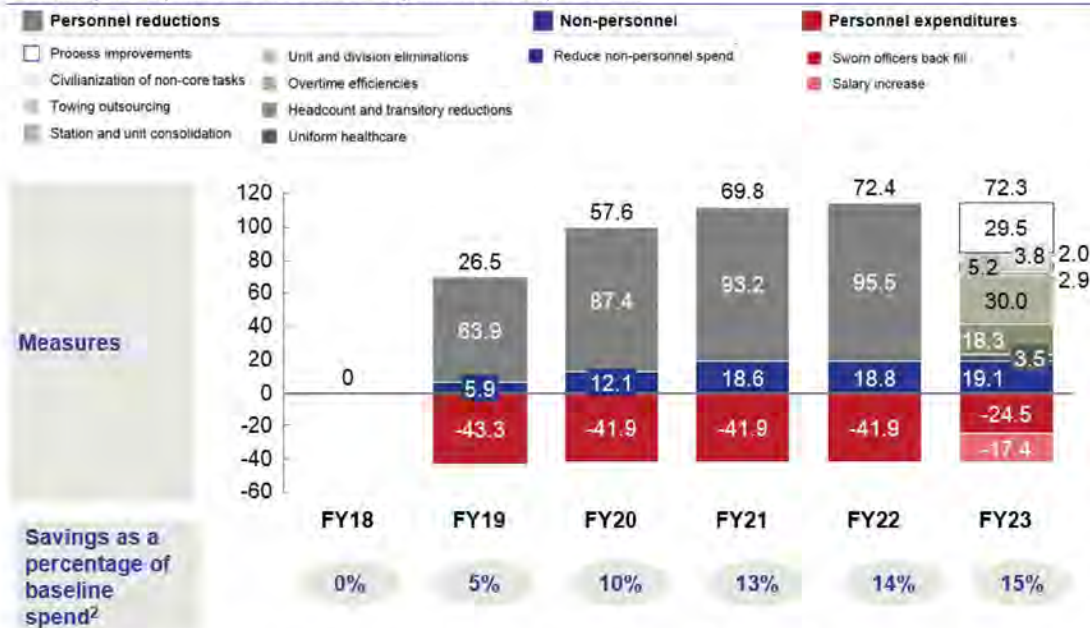
DPS must achieve \$20.5 million in net personnel savings and \$5.9 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit. Refer to **Exhibit 46** for annual personnel and non-personnel savings that must be achieved through FY2023.

⁹³ Time, 2017

⁹⁴ "Natural Disasters and Social Order", International Journal of Mass Emergencies and Disasters

EXHIBIT 46: DPS SUMMARY OF MEASURES IMPACT

Summary of Department of Public Safety measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributable to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below graph.
² Inclusive of all savings measures over baseline, i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

Process improvements

DPS should **reduce administrative tasks and activities** by leveraging modernization, including digitization of incidence reporting, automation of time and attendance, and consolidation of statistical reporting. Furthermore, DPS will streamline vehicle maintenance processes through superior scheduling and procurement protocols, which can reduce the need for vehicle maintenance staff. Process improvements would lead to \$29.5 million in run-rate savings by FY2023.

Civilianization of non-core tasks, including outsourcing towing

DPS should replace sworn officers currently performing civilian duties—such as mechanics, radio operators, records and report keepers, area command statistics compilers, and maintenance workers—with **less expensive civilian personnel**. Additionally, DPS can outsource towing services to a third-party vendor to cover approximately ~93% of towing needs. These initiatives would lead to \$5.8 million in run-rate savings by FY2023.

Station, unit, and division consolidation and eliminations

DPS should **consolidate police stations, transit units, and specialized units** to reduce the amount of administrative personnel required (e.g., station desk officers, station commanders and directors, stations auxiliary commanders and directors, and vehicle managers). Simultaneously, DPS should **eliminate units and divisions** which perform duplicative services already provided by other agencies within the Government (e.g., the Divers Unit, the Rescue Squad Division, and Mounted Divisions). These initiatives should jointly lead to \$8.0 million run-rate savings by FY2023.

Overtime efficiencies

The Government spent approximately ~\$50 million on overtime last year (excluding the outsized overtime needs resulting from Hurricane Maria). This level of overtime is considerably higher than the PPP-adjusted overtime for comparable police forces in U.S. mainland states. For instance, Connecticut, which has a similar population to Puerto Rico and a slightly-higher number of violent crimes (273 per 100,000 inhabitants vs. 224 per 100,000 inhabitants in Puerto Rico), had PPP-adjusted overtime spend of only ~\$28 million in 2017. This gap comes even though Connecticut's total police spend per capita is ~\$140 less than in Puerto Rico⁹⁵.

Through the levers identified in the above measures, in addition to general efficiencies in scheduling and overtime management, DPS can **reduce paid overtime by 60%**. Overtime efficiency efforts should lead to \$30.0 million run-rate savings by FY2023.

Sworn officers back fill and headcount/transitory reductions

According to a Government analysis conducted in response to the PRPD's ongoing consent decree adjudication under the U.S. Department of Justice, there is a need to **redeploy sworn officers to fill capacity deficiencies in operational functions**⁹⁶. This redeployment will lead to a need for 644 additional officers to be deployed to the field. This measure will lead to \$24.5 million run-rate additional costs by FY2023. Simultaneously, attrition and headcount reductions among non-sworn, regular DPS employees (~162 employees), as well as facilitating the departure of 50% of DPS transitory employees, can create \$18.3 million in annual savings by FY2023.

Salary increase

To ensure that DPS continues to **retain police officers**, despite the presence of significantly higher-paying positions within police departments on the U.S. mainland⁹⁷, DPS should institute a \$1,500 annual raise for all sworn personnel by FY2019. This measure is expected to lead to \$17.4 million run-rate additional costs by FY2023.

Uniform healthcare and non-personnel spend

As detailed earlier in this Chapter, these measures to **standardize employee healthcare and decrease non-personnel spend** through procurement optimization (e.g., police fleet vehicles) should lead to \$3.5 million and \$19.1 million in annual savings by FY2023 for uniform healthcare and non-personnel spend, respectively.

12.8 Department of Corrections and Rehabilitation (DCR)

12.8.1 Current state and future vision for DCR

DCR manages the functions and policies of the Puerto Rican correctional system, including penal institutions and rehabilitation facilities, for men, women, and juveniles. The Correctional Health Department provides healthcare to the inmates under the jurisdiction of DCR. Their combined FY2018 budgets are \$404M, and they include a total of 7,809 employees and 10,339 prisoners based on latest available data from OMB, leading to total spend of ~\$39,000 per prisoner.

⁹⁵ Connecticut Office of the State Comptroller; census data 2014; FBI Crime Justice Information Services

⁹⁶ The report is expected to be completed mid-2018

⁹⁷ Current average salary for a sworn officer in Puerto Rico is \$34,600, which is ~45% of U.S. median according to the Bureau of Labor Statistics (Police and Detectives)

EXHIBIT 47: LIST OF AGENCIES IN DCR GROUPING

1 Department of Corrections and Rehabilitation

2 Correctional Health Department

DCR's combined number of employees is much higher than the relative number of employees in peer prison systems within mainland U.S. states. While the reality of an aging prison system dependent on outdated technology necessitates a relatively higher number of employees, the actual number of employees is substantially higher than comparable benchmarks; whereas DCR's current FTE-to-inmate ratio is 0.76, the 50th percentile of U.S. states has only 0.41 FTEs per inmate.⁹⁸ Additionally, Puerto Rico's prisons are underutilized: while most U.S. state prison systems are near 100% utilization⁹⁹, Puerto Rican prison facilities are only 78% utilized due to declines in the prison population over the past decade that have not translated into reductions in government resources dedicated to prisons.

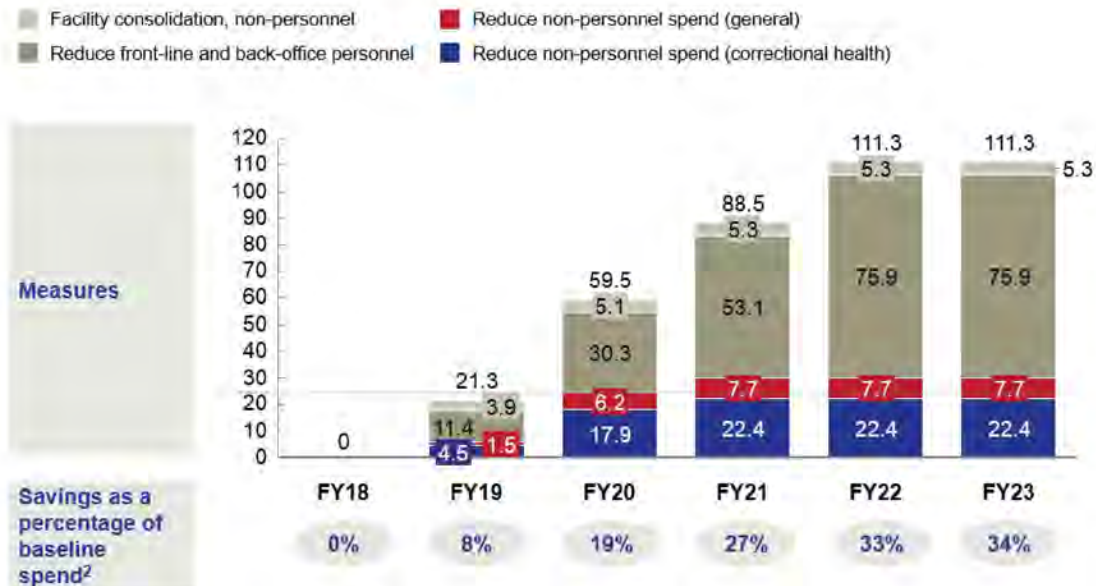
By **rightsizing Puerto Rico's correctional facilities and FTE footprint** to reflect changes in the prison population and improving procurement effectiveness on all corrections categories, the Government must achieve five-year cost savings of \$395M.

12.8.2 Efficiency measures for DCR

DCR must achieve \$13.1 million in personnel savings and \$8.4 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 48** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 48: DCR SUMMARY OF MEASURES IMPACT

Summary of Department of Corrections measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below graph

² Inclusive of all savings measures over baseline, i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

⁹⁸ NASBO, FBI, BJS databases

⁹⁹ Census data, 2014; Bureau of Justice Statistics, 2014

Facility consolidations

To bring the system in line with the requirements of the population, **DCR should close 9 prisons, each with utilization at 65% or below to reach an overall system utilization of 93%**, while still maintaining appropriate separation of different inmate risk profiles and populations, including men, women, and juveniles. These consolidations will provide the opportunity to capture **both personnel and non-personnel savings through reduced operations.**

First, 40% of non-personnel operating expenses could be captured for each closed facility by consolidating physical footprint, winding down contracts, and other levers, with the remaining operating expenditures transferred to support population increases in other facilities and account for inability to reduce fixed costs. **Personnel savings could be captured by reducing DCR FTEs per inmate** to reach the U.S. median benchmark of 0.41 FTEs per inmate through attrition and active workforce reductions¹⁰⁰.

Five prisons are slated for closure in FY2018,¹⁰¹ and their prisoners have already been relocated to other prisons. Two additional prisons are expected to be closed in FY2019, and two more in FY2020. Implementation costs that are accounted for in savings calculations include transporting prisoners to other facilities, frictional costs of redundant personnel across prisons and inmates, among other initiatives.

To further enable savings from consolidations and reduced FTEs, DCR may contemplate initiatives to actively reduce prison population as appropriate, such as early release with electronic monitoring, initiating programs to reduce recidivism like in-prison drug rehabilitation, and increased training and occupational programs.

Non-personnel optimization

DCR currently spends \$64 million on **procurement**, costs that can be reduced through a variety of means, including leveraging the Federal General Services Administration, utilizing e-auctions, launching competitive Requests for Proposal (RFPs), centralizing purchasing to the greatest extent possible, and outsourcing/contracting responsibilities. Using benchmark savings percentages for major spend areas would result in ~\$8 million potential savings opportunity, excluding correctional healthcare.

For **correctional healthcare**, the Government currently spends ~\$6,000 per inmate based on the terms of the Correctional Health Services Corporation contract. By comparison, the 50th percentile of U.S. states spend \$3,800 per inmate.¹⁰² Bringing this per-inmate spend in line with the 50th percentile of U.S. states would generate annual savings of ~\$23 million by FY2023.¹⁰³ The Government can unlock these savings by renegotiating existing contracts, launching competitive RFPs for other correctional healthcare providers that will provide terms more in-line with mainland spending practices, reconsidering level of service due to the currently declining prison population, and strategically evaluating insourcing options.

¹⁰⁰ Census data, 2014; Bureau of Justice Statistics, 2014

¹⁰¹ These are identified as prisons with prison populations of 0, based on latest data from DCR and Rehabilitation; they include: Esc. Ind. Mujeres Vega Alta, Hogar Adaptacion Soc. Vega Alta, Inst. Correccional Zarzal, Modular Detention Unit, and Vivienda Alterna Anexo 246 Ponce

¹⁰² Source: Pew data 2011, normalized for GDP PPP and inflated to 2017 dollars based on CPI data (2011-2017 compounded inflation rate of 10%)

¹⁰³ Pew data, 2011

12.9 Hacienda / Office of the CFO (OCFO)

12.9.1 Current state and future vision for Hacienda / Office of the CFO

Currently, the financial management functions—as well as basic administrative functions—of the Government are spread across several entities; for instance, the Office of Management and Budget is responsible for administering the Annual Budget of Puerto Rico, the General Services Administration is responsible for procurement processes, and ownership of other fiscal and payroll responsibilities are distributed across another four agencies. This distribution has led to historical problems for the Government, as the number of bank accounts, special revenue funds, and other untracked funding and expenditure streams have proliferated. Indeed, the lack of one office that has authority over all revenues and expenditures—and is also accountable for balancing the budget—has been a **major barrier for the Commonwealth's ability to regain its fiscal sustainability and publish accurate and timely financial reporting.**

As discussed above, consistent with the Governor's proposal, the Commonwealth shall **consolidate all financial management, HR and procurement activities under the OCFO.** The OCFO will have authority and accountability over the following agencies, which could be consolidated or eliminated:

EXHIBIT 49: LIST OF AGENCIES IN HACIENDA / OCFO GROUPING

1 Department of Treasury (Hacienda)	4 Treasury (internal entity)
2 Office of Management and Budget	5 General Services Administration
3 Office of Administration and Transformation of HR	6 Financial Advisory Authority and Tax Agency of Puerto Rico (AAFAF)

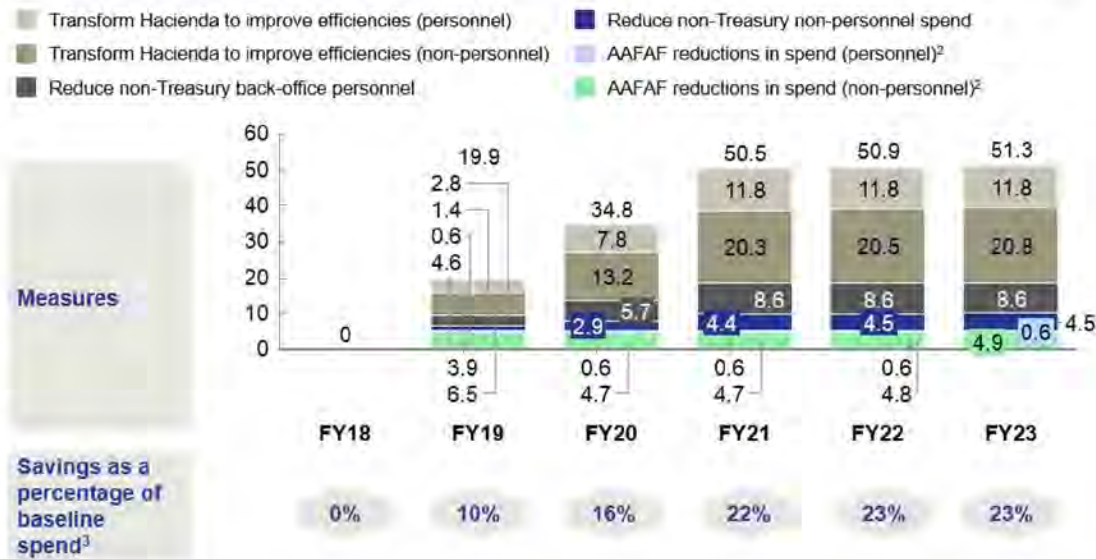
The OCFO must be responsible for all matters related to revenues and expenditures, and will be the key financial management agent. Hacienda, as the OCFO, will drive implementation of EITC, tax law initiatives, and new revenue-collecting initiatives (e.g., Internet sales tax collections). Already, Hacienda has advised the Oversight Board it has been working to launch several new initiatives to improve its enforcement effectiveness and increase the volume of revenues collected, such as through the SURJ transition.

12.9.2 Efficiency measures for Hacienda / Office of the CFO

Hacienda / OCFO must achieve \$7.4 million in personnel savings and \$12.5 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 50** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 50: HACIENDA/ OFFICE OF THE CFO SUMMARY OF MEASURES IMPACT

Summary of Hacienda / OCFO measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below graph.
² Net of AAFAF Title III Expenses
³ Inclusive of all savings measures over baseline. i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

Transform Hacienda to improve efficiencies

Hacienda itself must attain an overall **15% net reduction in costs (approximately \$33 million), which is 25% gross (approximately \$54 million)** which is in line with the level of cuts seen in other Treasury Department transformations. For instance, a transformation within Her Majesty's Revenue and Customs agency in the UK successfully cut costs by 25% over a five-year period through a series of management initiatives, including reducing IT costs, increasing operational efficiency, reducing the real estate footprint, and overall process improvement.¹⁰⁴ Many of initiatives can be leveraged by Hacienda, in addition to reforms unique to Puerto Rico, including but not limited to:

- Partnerships with private banks to reduce real estate and personnel footprint (estimated to save approximately ~\$20 million per year)
- Non-personnel spend (e.g., support service consolidation) and procurement optimization (estimated to save approximately ~\$12 million per year)
- Initiatives related to digitization and general process and efficiency improvements

While Hacienda must target gross reductions of 25%, 40% of these reductions (~\$16 million) should be **reinvested in compliance activities**, providing the budget for hiring additional Hacienda employees needed to implement new compliance activities, as well as for technology investment. After subtracting the ~\$22 million to be reinvested in compliance activities, this measure amounts to \$32.6 million in annual net savings by FY2023.

Reduce non-Treasury back-office and non-personnel

¹⁰⁴ National Audit Office, "Reducing Costs in HM Revenue & Customs," 2011

Overall **back office and non-personnel savings** targets are detailed in *Section 12.2*, and include levers such as procurement optimization, consolidation of support functions, and similar initiatives. Back office savings must lead to \$9 million run-rate savings by FY2023, and non-personnel savings must lead to \$5 million in annual savings by FY2023.

AAFAF reductions in spend

Unlike other entities within the Hacienda/OCFO, AAFAF will be subjected to a 7.5% cut (roughly ~50% of the level of cuts prescribed to other government agencies). These cuts must lead to savings of \$6 million per year by FY2023.

12.10 Department of Economic Development (DDEC)

12.10.1 Current state and future vision for the Department of Economic Development

DDEC includes a consortium of agencies critical to **incentivizing and managing the economic recovery of Puerto Rico's private sector** following recent seismic changes to the marketplace, including the removal of Federal corporate tax incentives and the debilitating impact of Hurricanes Irma and Maria. To promote growth, DDEC is driven by a strategic economic plan to promote high-impact projects, reenergize existing industries, and promote new strategic initiatives. In addition, DDEC manages a variety of programs on the Island intended to promote Puerto Rican entrepreneurship, youth employment, and other critical economic development functions. In the aftermath of Hurricane Irma and Maria, these programs will be crucial for the vitality of the Puerto Rican economy through increasing participation in the job market and attracting new business to the Island.

The agencies to be consolidated are as shown below (**Exhibit 51**).

EXHIBIT 51: LIST OF AGENCIES IN DDEC GROUPING

1 Department of Economic Development and Commerce (DDEC)	7 Local Redevelopment Authority for Roosevelt Roads
2 Puerto Rico Industrial Development Company	8 Permits Management Office
3 Puerto Rico Trade and Export Company	9 Puerto Rico Tourism Company
4 Office of Industrial Tax Exemption	10 Planning Board
5 State Office of Energy Policy	11 Institute of Statistics
6 Commonwealth of Puerto Rico Regional Center Corporation	

The agencies within the grouping are responsible for a variety of efforts to maintain a robust economic marketplace within Puerto Rico, including supervising public policy, creating and retaining jobs, attracting capital investment, and promoting tourism. However, the diffusion of these weighty responsibilities across so many agencies has led to an **inconsistent approach to overall economic development**. For instance, the Government currently lacks a coherent development strategy between the existing incentives code and the initiatives pursued by agencies within DDEC, and until now there has been no single entity solely responsible for incentivizing foreign direct investment in Puerto Rico.

Under the new grouping construct, DDEC should be better able to coordinate its efforts to spur economic development by providing clear goals and metrics for success. In addition, it will drive savings by reducing the back-office operations of the newly-consolidated agencies, pursuing digitization, procurement centralization and other efforts to reduce non-personnel spend, and reducing the number of front-line personnel to better reflect mainland standards for a right-sized economic development operation.

12.10.2 Efficiency measures for DDEC

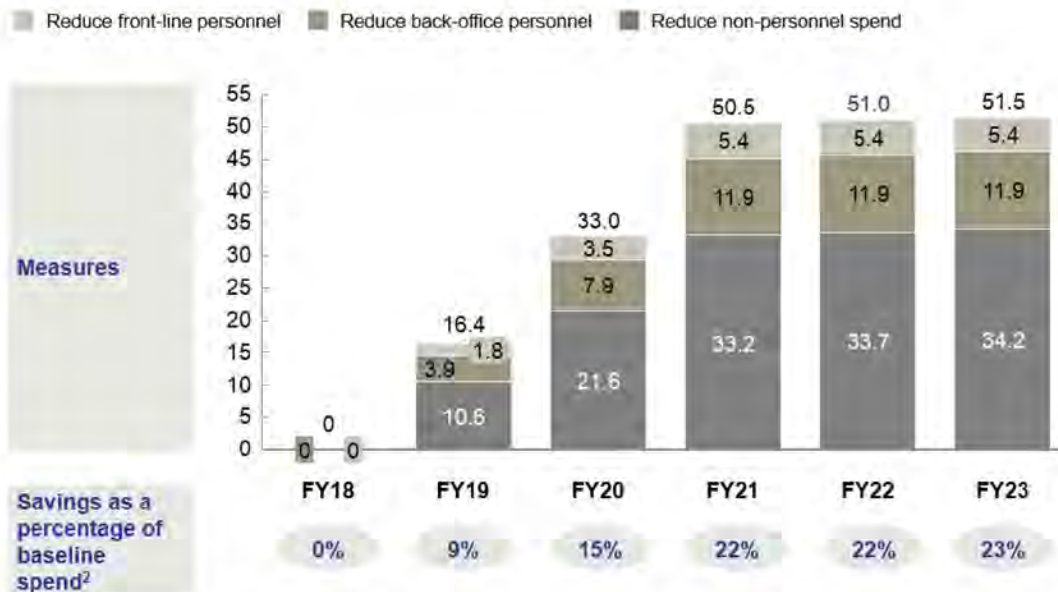
The following stipulations will govern the future state of DDEC:

- The DDEC budget should include **carve outs for the Destination Marketing Office and Invest Puerto Rico**, as these institutions will perform complementary functions to DDEC
- Each entity within DDEC grouping should have **clearly defined responsibilities and governance structures** that limit costs moving forward and prevent overlapping duties among agencies in the grouping (e.g., specific marketing / promotion agency mission should be separate from the corporate development / retention agency)

DDEC must achieve \$5.7 million in personnel savings and \$10.6 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 52** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 52: DDEC SUMMARY OF MEASURES IMPACT

Summary of Department of Economic Development measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare, Christmas bonus) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below graph.
² Inclusive of all savings measures over baseline, i.e. savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

Right-size the number of front-line employees

Therefore, DDEC should **reduce front-line personnel** by 20% to ensure a streamlined, efficient organization, leading to \$5.4 million in annual savings by FY2023.

Right-size the number of back-office employees

A government analysis identified a redundancy in service of back-office personnel across DDEC.¹⁰⁵ DDEC could **consolidate back-office operations** of the newly-merged agencies as detailed in *Section 12.2*, leading to \$12.0 million run-rate savings by FY2023.

Optimize non-personnel spend

DDEC must pursue a variety of initiatives to **reduce non-personnel spend**, primarily centered on procurement optimization and digitization of operations (e.g., digitizing the permit application process), as detailed earlier in Chapter 12. These initiatives must lead to \$34.0 million run-rate savings by FY2023.

12.11 Legislative Assembly and the General Court of Justice

The current size of the Puerto Rican Legislative Assembly is significantly larger than comparable legislatures in U.S. mainland states, even when accounting for the demands of full-time legislatures and excluding the money that the Legislature spends on supporting non-profit organizations. Reductions to the size and funding of the Legislature are necessary to bring it in line with benchmarks and optimize government funds. Hence, the Legislature will experience right-sizing measures proportional to those experienced by all agencies in the Executive Branch.

The General Court of Justice is similarly over U.S. mainland cost benchmarks, and will therefore also experience rightsizing measures equivalent to a 10% reduction in their annual budget.

12.12 All other agencies

The following agency groupings were evaluated using a top-down approach which primarily relied on the levers and initiatives highlighted earlier in Chapter 12.

Exhibit 53 shows the summary of the savings that each agency must achieve.

¹⁰⁵ DDEC analysis, 2018

EXHIBIT 53: PROPOSED SAVINGS TARGETS FOR OTHER AGENCY GROUPINGS

Savings targets¹, \$M

Grouping	FY18	FY19	FY20	FY21	FY22	FY23
Agriculture	-	5.1	8.0	10.9	11.3	11.8
Automobile Accident Compensation Authority	-	18.3	24.1	30.0	31.0	32.0
Courts and Legislature	-	55.5	59.3	63.2	67.1	71.1
Culture	-	2.8	5.2	7.6	7.8	8.1
Environmental	-	8.1	13.3	18.7	19.5	20.4
Executive Office	-	16.8	26.4	36.3	38.2	40.1
Finance Commission	-	3.8	5.0	6.4	6.6	6.8
Financial Oversight and Management Board	-	5.3	5.6	5.6	5.6	5.6
Justice	-	6.0	11.3	16.8	18.2	19.6
Labor	-	14.1	21.7	29.5	31.3	33.1
Land	-	2.7	3.9	5.2	5.4	5.5
Ombudsman	-	0.9	1.6	2.4	2.6	2.7
Public Works	-	26.8	44.4	62.6	65.1	67.4
Social Welfare	-	22.3	40.5	57.5	66.2	73.1
State	-	1.7	2.7	3.7	3.9	4.0
State Insurance Fund Corporation	-	28.2	51.1	74.6	78.8	83.0
Universities (excluding UPR)	-	1.1	1.5	2.0	2.2	2.3
Utilities Commission	-	2.9	4.0	5.2	5.5	5.7
Independent Agencies	-	18.9	26.5	34.0	36.6	39.2
Closures	-	0.9	1.7	2.6	2.8	2.9
Total	-	242.1	357.8	474.8	505.5	534.3

¹ Savings include additional personnel savings achievable through compensation measures (payroll freeze, uniform healthcare, Christmas bonus), as well as additional savings attributable to each agency grouping as part of the OGFO's special revenue fund deficit reduction measure (detailed in the OGFO chapter of the New Fiscal Plan)

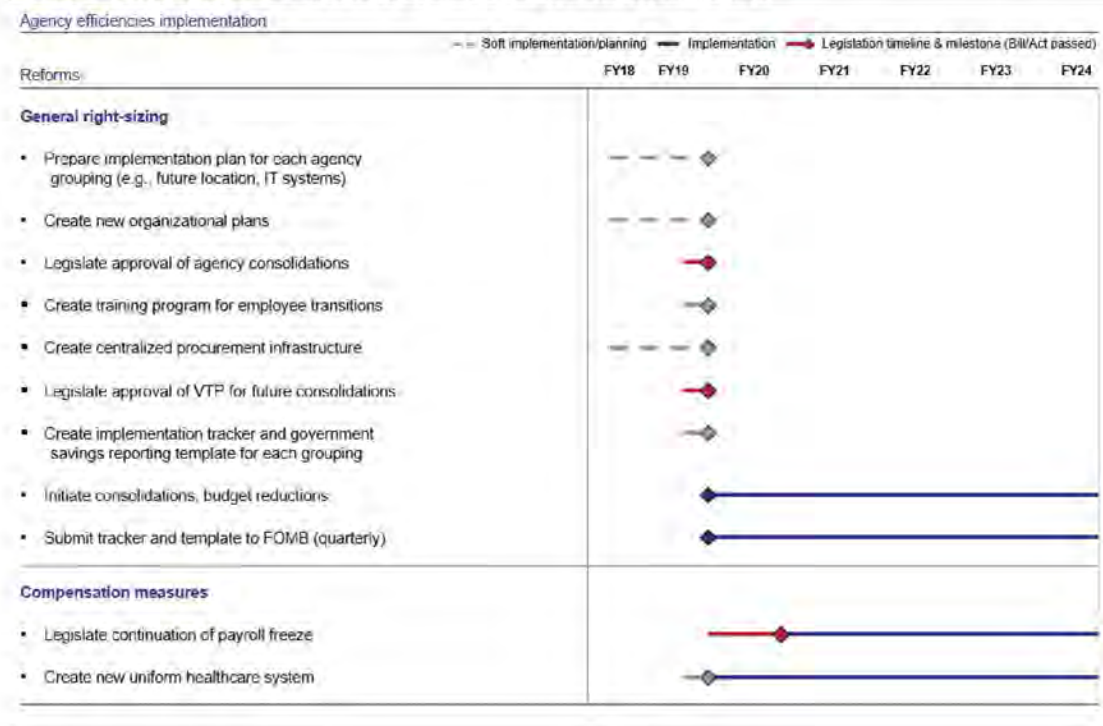
12.12.1 Importance of enabling agencies that promote public integrity and transparency

There is wide agreement that to drive a successful fiscal transformation within the Government of Puerto Rico, it will be important to promote public integrity and transparency at every turn. Within the Government, several agencies are dedicated to maintaining oversight and fiscal responsibility; namely, the Office of the Comptroller and the Office of Government Ethics. In line with the priorities of the Governor, the functioning of these agencies is critical to achieving the goals and ensuring the long-term sustainability of the fiscal plan. Accordingly, the budgets for the Office of the Comptroller and the Office of Government Ethics will not be affected by agency-specific right-sizing measures.

12.13 Implementation plan

Exhibit 54 depicts the implementation timeline for agency efficiencies measures, with the understanding that more detailed implementation plans will be submitted for each agency grouping by the end of FY2018.

EXHIBIT 54: AGENCY EFFICIENCIES IMPLEMENTATION TIMELINE



Chapter 13. HEALTHCARE REFORM

13.1 Current State of Puerto Rico's Medicaid program

Prior to Maria, 46% of Puerto Ricans received their health coverage through the Commonwealth's state-run insurance program, Mi Salud; this was the highest share of publicly-funded health insurance coverage in America, with the next highest state, West Virginia, covering only 29% of its population under public plans.¹⁰⁶ In addition to its large coverage population, Puerto Rico lags mainland states in both health outcomes and access. Puerto Ricans face higher rates of chronic conditions like hypertension (11.3%-points higher than the U.S. mainland), diabetes (4.4%-points higher), and asthma (1.6%-points higher).¹⁰⁷ Only 28% of the 62,000 Mi Salud members with diabetes and 17% of the 132,000 Mi Salud members with hypertension are in the respective disease management programs. Puerto Rico also has higher premature birth and infant mortality rates,¹⁰⁸ and higher rates of adults reporting fair or poor health.¹⁰⁹ At the same time, 72 of Puerto Rico's 78 municipalities are

¹⁰⁶ Kaiser Family Foundation, "Medicaid State Fact Sheets: Percent of People Covered by Medicaid/CHIP, 2015"

¹⁰⁷ CDC (Centers for Disease Control and Prevention), "BRFSS Prevalence and Trends Data," 2015-2016. Behavioral Risk Factor Surveillance System

¹⁰⁸ Puerto Rico infant mortality rate is 6.4 per 1000 (2016) vs. U.S. 5.8 per 1000; premature birth rate is 11.8% vs. 9.6% in U.S. "Puerto Rico," World Factbook (Washington, DC: CIA)

¹⁰⁹ 35.4% of Puerto Ricans report fair or poor health, versus 17.9% U.S. average, and 19.3% in Florida and 22.0% in Mississippi (two most comparable states). Table 3, Krista Perreira et al. Urban Institute. Jan 2017. "Environmental Scan of Puerto Rico's Health Care Infrastructure"

deemed “medically underserved areas,”¹¹⁰ with 500 doctors leaving per year (pre-Maria). Puerto Rico has half the rate of specialists as compared to the mainland in critical fields (e.g., emergency physicians, neurosurgeons).¹¹¹

Mi Salud covers individuals through three primary funding sources: Federally-matched Medicaid, the Children’s Health Insurance Program (CHIP), and the Commonwealth’s self-funded insurance program for low-income adults who do not qualify for Federally-matched Medicaid. An additional 8% of the Puerto Rican population receives some benefits from Mi Salud as part of the Platino program, which supports Medicare recipients who also qualify for Medicaid (also known as “dual-eligible”). Annually, these programs collectively cost \$2.77 billion (as of FY2018), with the Commonwealth responsible for the vast majority of costs due to caps on Federal matching (*see Section 5.1.3 for more information on Medicaid Federal funds*). Puerto Rico faces real and growing challenges with rising healthcare costs, with premiums growing significantly faster than inflation. Even with some cost containment measures in place, per-member per-month (PMPM) disbursements rose 6.3% from FY2017 to FY2018. And based on national healthcare cost inflation trends plus increased post-hurricane need, Mi Salud PMPMs are projected to rise by nearly 40% over the next 6 years in the absence of additional measures.

The Bipartisan Budget Act of 2018 (BBA 2018) provides the Commonwealth temporary relief from raising healthcare costs by expanding the amount of Federal reimbursement over the next 18 months. Starting in September 2019, however, the Commonwealth will hit a “Medicaid cliff” whereby it will be responsible for multi-billion-dollar annual healthcare expenditures unseen since before the passage of the Affordable Care Act provided additional Federal funding in 2011. It is crucial, therefore, that ASES take advantage of the additional runway provided by the BBA funding to put in place reforms that reduce long-term health expenditure growth rates.

13.2 Future vision for healthcare reform

The future vision for the Puerto Rican healthcare system is to promote an overall healthier population through provision of high-quality services to all citizens in need. To do so, the Government has proposed targeting the following:

1. **Decrease the annual per-member cost growth rate to the median level of Medicaid growth rate** by implementing value-based healthcare reforms, such as new payment models to incentivize care integration among providers
2. **Shift care from higher-cost to lower-cost channels;** for example, reducing the number of emergency room visits and encouraging and enabling the role of primary care physicians in providing preventative care
3. **Drive better health outcomes for the population,** indicated especially by reduced rates of chronic conditions among adults
4. **Coordinate healthcare initiatives in the community** to promote efficiency of services and a community-wide focus on health

¹¹⁰ Areas with a shortage of personal health services, e.g., areas or populations that have too few primary care providers, high infant mortality, high poverty, and/or high older adult population

¹¹¹ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, “ASPE Issue Brief: Evidence Indicates a Range of Challenges for Puerto Rico Health Care System” (Jan 12, 2017)

13.3 Key initiatives for healthcare reform

Addressing Puerto Rico's healthcare challenges while also reducing costs will require a portfolio of targeted actions in the short term (e.g., reducing waste and abuse) and long term (e.g., structural reforms to healthcare model to improve quality relative to cost).

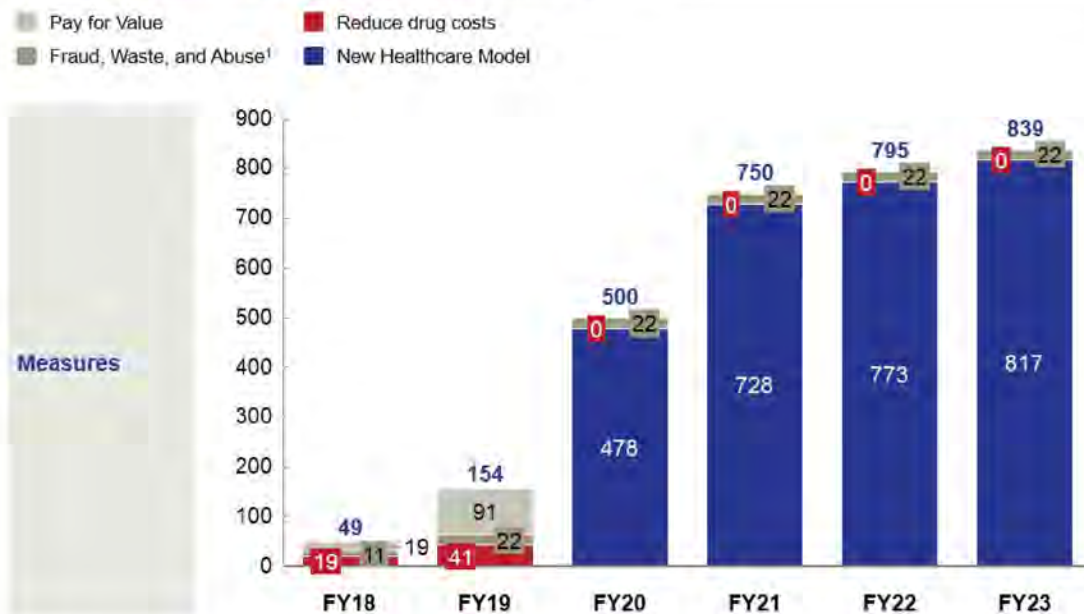
In early FY2018, ASES began efforts to reduce healthcare costs, including implementation of preliminary enrollment verification efforts with DCR and private insurers; standardization of fee schedules for providers; and prescription drug cost controls such as increased pharmacy discounts on branded drugs, mandatory dispensing of generic drugs, and changes to prescription coverage guidelines.

Beginning in FY2020, the Government must implement a new healthcare model, currently in development, through changes to how the Island's managed care organizations (MCOs), are contracted and incentivized as the third-party administrators of Mi Salud. The new model's savings must reach a run-rate annual savings of ~\$839 million by FY2023 (off the FY2022 baseline of approximately \$3.4 billion), a measure run-rate which is then projected to increase as the baseline expenditures increase at long-term healthcare inflation rate of 4-6%.

Exhibit 55 provides an overview of the core savings measures.

EXHIBIT 55: MI SALUD BASELINE SPEND AND MEASURES

Summary of Healthcare (Medicaid) reform measures impact, \$M



1 Includes MFCU and MMIS

2 Includes only premium-related expenditures for Mi Salud and Platino costs

13.3.1 Pursue value based reforms to improve quality relative to cost of care

Pursuing value-based improvement initiatives with demonstrated success can help reduce Mi Salud's per-member per-month (PMPM) rates. Similar value-based programs have been piloted in other states, and typically save between 2-10% of costs. In Puerto Rico, value-based reforms may result in somewhat lower than average savings due to the breadth of other savings measures being implemented simultaneously in Mi Salud, and unique post-Hurricane

challenges such as a potential increase in behavioral health needs. Value-based reforms will be combined with a portfolio of other initiatives in the “new healthcare model” to achieve savings targets. This measure includes:

Improved coordination of care. New approaches that emphasize care coordination and align incentives between patients, providers, and payors can produce improvements in health outcomes while lowering costs. Given the preponderance of chronic conditions and potential rising behavioral and mental health needs in the wake of Hurricane Maria,¹¹² better access and coordination of mental health services will become increasingly important. Care coordination models like patient centered medical homes – which empower patients to work closely with a primary care provider to manage treatment plans across multiple care providers – have been quite effective at improving outcomes for members with chronic conditions.¹¹³ ASES can serve as a coordination point for care organizations throughout the community, ranging from managed care organizations to education and faith-based community organizations. The new RFP issued by ASES is focused on developing such managed care programs for high cost, high need populations.

Reduced Emergency Room (ER) visits. Puerto Rican’s utilize the ER 3 times as often as peers on the U.S. mainland,¹¹⁴ with estimates as high as 90% of ER visits occurring for non-emergency care that could be treated in lower cost settings. Successfully shifting unnecessary ER visits to lower-cost settings, such as primary care offices or urgent care, could save roughly \$70-75 million annually, or 3% of total Mi Salud costs. Mi Salud could reduce ER utilization through several means, including patient education, increased ER co-pays, or changes to reimbursement policies.¹¹⁵

Reduce inpatient length of stay. Puerto Rico’s inpatient length of stay is 1.5 times the U.S. average.¹¹⁶ MCOs can incentivize reduced hospital readmissions and length of stay through improved discharge planning and increased staffing to manage weekend discharges. Some MCOs have already implemented such reforms in Puerto Rico.

Adjusting MCO payment models. ASES is already considering many changes to MCO – provider payment models to promote greater accountability and better align care delivery to outcomes amongst providers. Best practice value-based payment models from other managed care settings include direct pay-for-performance quality bonuses, providing fixed payments for a ‘bundle’ of services required to treat a specific condition, and providing special incentives to care for members with high-cost needs, such as behavioral health.

13.3.2 Reduce pharmacy spend

Prescription drug coverage is the largest category of spend in Mi Salud, contributing 26% of the total cost in treating the average patient. Nearly half of this spend comes from specialty drugs. Even after ASES-negotiated some prescription drug cost reduction measures,¹¹⁷

¹¹² Thomas Huelskoetter, Center for American Progress, “Hurricane Katrina’s Health Care Legacy” (August 15, 2015)

¹¹³ Patient-Centered Primary Care Collaborative, “Benefits of Implementing the Primary Care Medical Home: A Review of Cost & Quality Results, 2012” (Sept 2012)

¹¹⁴ JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

¹¹⁵ See, e.g., Schwartz et al. Copayment levels and their influence on patient behavior in the emergency room utilization in an HMO population. *Journal of Managed Care Medicine*. 2012; Wallace et al. How effective are copayments in reducing expenditures for low-income adult Medicaid beneficiaries? experience from the Oregon health plan. *Health Services Research* 2008; Lesley et al. Reducing frequent visits to the emergency department: a systematic review of interventions. *PLOS*. 2015

¹¹⁶ As of 2014. JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

¹¹⁷ FY2018 Milliman Actuarial Certification

pharmacy costs grew 14% annually from FY2016 to FY2018 in Puerto Rico,¹¹⁸ compared to 6% per year in U.S. Medicaid programs.¹¹⁹

Puerto Rico faces structurally higher prices than the mainland because, unlike U.S. states, it cannot participate in the Federal Medicaid Drug Rebate Program (MDRP), and may only seek voluntary or supplemental rebates. That said, ASES can lower the cost of prescription drug coverage by replacing higher cost drugs with cheaper, equally effective alternatives, driving increased use of generics and imposing utilization controls. These initiatives resulted in negotiated savings of \$4.31 PMPM in Mi Salud's FY2018 contracts. However, to sustain these savings, MCOs must engage in ongoing monitoring and enforcement of policy changes to further refine drug coverage lists and utilization management policies due to changing prescription patterns.

13.3.3 Reduce fraud, waste, and abuse (FWA)

The U.S. Government Accountability Office found evidence that MCOs have not consistently reported improper payments to providers billing to the system. Further, it found that many MCOs face conflicts of interest in finding and eliminating fraud.¹²⁰ Typical waste, fraud, and abuse reduction programs in other state Medicaid programs and health insurers have been able to achieve 1-3% cost savings. These savings have been reached through: pre-payment review (e.g., reviewing claims before payment to identify outliers / issues); auditing and enforcement units to investigate suspicious behavior; advanced analytics capabilities to review many actions to identify inefficient or fraudulent activities in post-payment review, such as identification of "impossibility" coding (e.g., billing for over 24 hours of service in one day), or frequently repeated or high value procedures; and long term policy or organizational transformation.

To combat FWA, ASES shall:

- Fully operationalize a Medicaid Fraud Control Unit (MFCU)—which it has already launched--outside of the MCOs to identify and prosecute fraudulent charges
- Establish a functional Medicaid Management Information System (MMIS) to track utilization, claims, and provide the data inputs for advanced analytics assessments to identify inappropriate spending; and
- Use data to obtain reimbursement for improper payments and to identify and eliminate the systematic causes that enabled the problematic activities in the first place.

Puerto Rico does not currently have an operational MMIS or MFCU, but is in the process of developing and shall develop both programs. Successful operationalization of the MMIS will enable ASES to receive \$1.2 billion of the BBA 2018 allocated funding, contingent upon establishment of methods to lower FWA and collect/report reliable information to the Transformed Medicaid Statistical Information System (T-MSIS).¹²¹

13.3.4 Enrollment verification

In addition to overpayment for eligible beneficiaries, ASES faces a challenge in ensuring it is serving the proper beneficiaries—and preventing those who are ineligible from receiving benefits. Over-enrollment typically occurs when residents have private insurance, are in the

¹¹⁸ Ibid

¹¹⁹ Express Scripts 2016 Drug Trend Report

¹²⁰ GAO "Medicaid and CHIP Increased Funding in U.S. Territories Merits Improved Program Integrity Efforts," April 2016

¹²¹ MACPAC, "Medicaid and CHIP in Puerto Rico," report, February 2018

corrections system, have moved to other states, or are deceased. Data system limitations (e.g., limited data sharing with other systems; manual dis-enrollment after eligibility expiration) mean that it often takes years to dis-enroll ineligible members, and many are never removed. Over enrollment could be identified through coordination of benefits, interagency data sharing, state-specific MOUs, and the national Public Assistance Reporting Information System (PARIS) and T-MSIS Medicaid interstate match.

Pre-Maria, Mi Salud had an estimated 5% over-enrollment rate, translating to Mi Salud improperly paying for roughly 62,000 beneficiaries.¹²² Maria is likely to augment these challenges. Due to the hurricane, 12% of Puerto Rico's population is expected to emigrate by FY2023, and it is estimated that a roughly proportionate number of Mi Salud members will also leave the Island. Given the limited data capabilities at present, without active efforts to dis-enroll those who leave and do not return, it is expected that ASES will continue to pay for these departing beneficiaries for a full year after they leave, resulting in Mi Salud reaching 10% over-enrollment in FY2018.

13.3.5 Implement a uniform fee schedule for providers

One way ASES has been able to put controls on spend growth is working with MCOs to implement a new fee schedule for providers. The updated schedule, which went into effect on July 1, 2017, provides 70% of Medicare reimbursement rates for each category of services, a sharp reduction for some specialty services on the Island (laboratory and radiology in particular), reducing PMPM by an estimated \$3.52 in FY2018.¹²³

13.3.6 Reduce administrative MCO costs through a single region model

ASES can reduce MCO administrative costs by switching from the current system of nine regions, each with a single MCO provider, to a geographically unconstrained competitive system with multiple MCOs serving the entire Island. This new single region MCO model should produce increased economies of scale for administrative operations and will lower costs through greater competition and incentives to enforce efforts to lower the cost of care.

ASES has already been moving the MCOs towards improved Medical Loss Ratios (MLRs), constraining the share of their PMPM costs not used for medical services. In the FY2016 contract, 10% of the PMPM went to administrative costs and profits; in the FY2018 negotiated rates, administrative costs and profits fell to 8.6%.¹²⁴ In FY2019, ASES plans to improve this MLR to 92% (8% leftover for administration and profits).¹²⁵

13.3.7 Stop-gap levers to ensure achievement of savings targets

As an extreme measure in cases where target run-rate savings are unachievable with the above measures, the following additional measures could be implemented to hit expenditure reduction targets.

Require cost-sharing for the Medicaid and Commonwealth populations

ASES could reduce healthcare spending by imposing cost sharing on specific services to disincentivize high-cost, low-impact behavior, such as visiting an ER for non-emergency services or using certain non-preferred drugs. Co-pays have been shown to reduce used of affected

¹²² Ballori Group estimate

¹²³ FY2018 Milliman Actuarial Certification

¹²⁴ FY2016 rate analysis; FY2018 Milliman Actuarial Certification

¹²⁵ Communication with ASES, Nov 21, 2017

services, and therefore should not apply to preventive care or other areas that reduce net health system costs, such as family planning services. Any required co-pay shall be determined on a service-by-service basis to selectively disincentivize high-cost, low-impact activities; further, co-pays will be implemented progressively, scaled to member income while exempting those without income and CHIP members.

Reduce coverage for select optional benefits

Medicaid requires all states to cover certain services, such as hospital stays, physician visits, preventive health services, family planning, and pregnancy-related care. Other benefits are considered optional, including: prescription drugs; physical, occupational, and speech therapy; dental; podiatry; optometry and glasses; prosthetics; chiropractor services; private duty nursing; hospice; and respiratory care services. Some of these optional benefits are provided by every state (such as prescription drug coverage), while others are covered by fewer than half of states. 4.3% of total Mi Salud payments¹²⁶ are related to the following categories of benefits coverage that at least one other state or territory does not cover:¹²⁷

EXHIBIT 56: OPTIONAL BENEFITS PROVIDED BY PUERTO RICO BUT NOT OTHER STATES/TERRITORIES

Optional benefit type	FY18 PMPM, \$	FY18 projected cost, \$M	States/territories not covering, %
Dental	\$4.38	65.5	7%
DME and supplies, prosthetics	\$1.53	22.9	4%
Private duty nursing/home health	\$0.99	14.8	59%
Professional – PT	\$0.67	10.0	30%
Professional – Vision, hearing, and speech exams	\$0.45	6.7	29%
Benefits glasses/contacts	\$0.14	2.0	18%
Outpatient facility – PT/OT/ST	\$0.04	0.6	36%
<i>Less CHIP portion of benefits¹</i>	<i>\$(0.59)</i>	<i>(10.9)</i>	
Total	\$7.61	112	

1 CHIP beneficiaries excluded from any potential benefit reduction

As a result, another second stop-gap measure could be to reduce Mi Salud coverage for select optional benefits, either by eliminating some optional benefits, imposing various levels of cost-sharing for remaining benefits, or restricting access. Optional benefit coverage reductions would affect Medicaid and Commonwealth Mi Salud members, but not CHIP members.

¹²⁶ When adding back in the \$0.59 PMPM attributable to CHIP coverage that would not be subject to reductions or cost sharing

¹²⁷ Kaiser Family Foundation Medicaid Benefits Data Collection, Oct 1, 2012 data (latest available as of Nov 2017). 2 states do not cover prosthetics, while every state covers durable medical equipment and supplies. 33 states do not cover private duty nursing, while every state covers home health services. 20 states do not cover occupational therapy; data was not available on outpatient PT/OT/ST specifically. Puerto Rico data from FY2018 Milliman Actuarial Certification

13.4 Implementation plan

Healthcare reform shall consist of specific measures (pay for value, reduction of drug costs, modification of benefits package, and FWA efforts) in FY2019 during the development of the new healthcare model. The new healthcare model shall take effect in FY2020 (**Exhibit 57**).

EXHIBIT 57: HEALTHCARE REFORM IMPLEMENTATION TIMELINE



Chapter 14. TAX COMPLIANCE AND FEES ENHANCEMENT

14.1 Current state and future vision for tax revenue collection

Puerto Rico has suffered from low tax compliance due to an unevenness in who pays taxes and lack of fear among violators, leading to limited downside for non-compliance and high upside for tax avoidance. **Due to its compliance and collections issues, the Commonwealth has not been able to drive as many revenues from taxes as it should each year.**

In response to these challenges, the Government reports it has already started implementing compliance-related changes within Hacienda. It is driving improvements in its culture and organization to boost enforcement capabilities, streamlining the process of filing taxes and reducing complexity in the system to lighten the burden of compliance on taxpayers. These efforts have already resulted in some success: in 2012, SUT compliance stood at 56%, and by 2016 had improved by 12 percentage points, to 68% compliance.¹²⁸ Moving forward,

¹²⁸ Departamento de Hacienda, November 2016

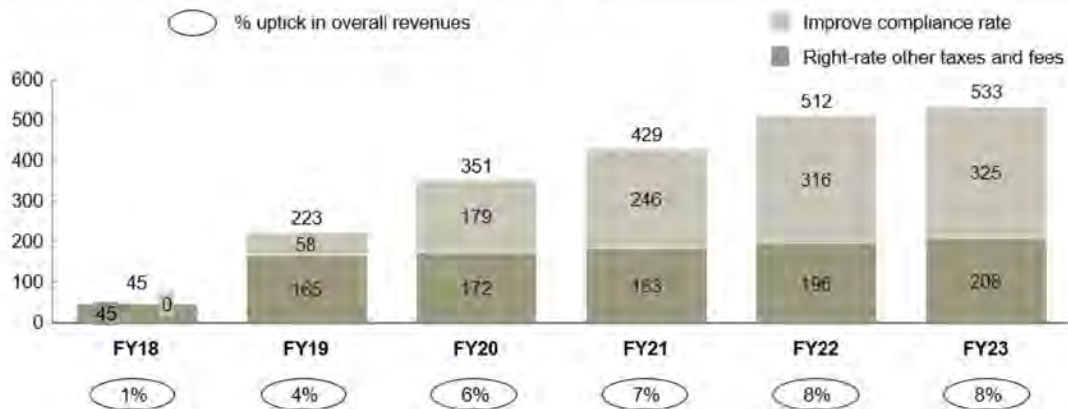
Commonwealth-commissioned tax reform report models estimate that Puerto Rico could reach 75% sales tax compliance.¹²⁹

14.2 Administrative tax initiatives to increase revenue collections

By driving administrative reform, the Commonwealth must increase revenues by \$2,092 million over six years, as shown below (**Exhibit 58**).

EXHIBIT 58: REVENUE MEASURES SUMMARY OF IMPACT

Summary of tax compliance and fees enhancement measures impact, \$M



14.2.1 Improve compliance rate

Given the progress to date in improving compliance rates and the ongoing gap to reach mainland performance, **the Government must target a 5% net uplift in revenues due to enhanced compliance by FY2022** – inclusive of implementation costs from reinvestment described in the “*Hacienda / Office of the CFO*” (see Chapter 12) – across the major tax lines (personal income tax, corporate income tax, and SUT). Such an improvement would also be in line with improvements seen in other tax transformations.¹³⁰

Recent compliance efforts in the Commonwealth have largely focused on collections outreach activities, obtaining one-time back taxes owed through a collections call center, flexible payment plans, and a large corporate taxpayer-focused team (with a longer-term goal of establishing a permanent separate unit). In the future, emphasis should shift towards **initiatives that promote a culture of compliance** to boost voluntary payment. The goal should be to reduce the cost of compliance while simultaneously raising the cost of non-compliance, through a combination of an increased likelihood of being caught while not paying taxes owed and more effective and enforceable penalties.¹³¹

¹²⁹ The report did not address how long it would take to reach this end state. “Commonwealth of Puerto Rico Tax Reform Assessment Project, Unified Tax Code of Puerto Rico: Tax Policy Implementation Options General Explanation of Principal Options” KPMG (October 31, 2014)

¹³⁰ Analogous case studies include Panama, Jamaica, and Spain, which saw 1.0 to 2.5 percentage point increases in tax ratio relative to GDP through their comprehensive tax overhauls. Puerto Rico achieving a 5% uplift from compliance, along with the other measures on corporate tax reform and increased fees, would produce a 2.25 percentage point increase in tax ratio relative to GDP, in line with these case studies

¹³¹ Xenia Velez presentation to the Oversight Board (Nov. 30, 2017), 3

- **Use new systems and processes to identify and remediate non-payment.** Hacienda will create a “premium return system” for individual and corporate taxpayers that enables taxpayers to claim certain deductions and exemptions only if their return is prepared by a certified public accountant following agreed upon procedures; the CPA’s review and certification of the return and supporting documentation as compliant with Puerto Rico’s tax laws would functionally serve as a “pre-audit,” reducing the likelihood of tax evasion and the need for a fuller review by Hacienda.
- **Create a new culture internally and externally** that shifts from the agency existing to serve the public (“*Hacienda para servirle*”) towards emphasis on Hacienda making sure everyone pays their taxes, but with as little friction as possible for the taxpayer and the agency.
- **Reduce the complexity of the tax system and process of filing taxes** to make it easier for individuals and businesses to pay their taxes correctly. Hacienda reports it plans to introduce pre-filled tax returns and fully digitize the tax filing system onto the Internal Revenue Unified System (SURI) platform that will enable easier filing, communication, and levying of penalties for late payment or non-payment. It must also ease the process of paying for licenses, stamps, and fees by shifting from a system of 64 agency payment centers to instead partner with retail banks, enabling taxpayers to pay their fees at any of 200 private sector locations in various communities (and within four years, 1,000 locations).
- **Institute advanced analytics and broad-reach, low-touch correspondence audits.** Small and medium taxpayers account for a significant share of the unpaid and underpaid taxes, but only a tiny fraction of these taxpayers receive full-scale audits due to the significant time and cost investment needed. While a traditional IRS audit costs an average of \$2,278 per case, automated notices or letters can be executed for \$52 to \$274 per case.¹³² Hacienda had begun a correspondence audit program prior to Hurricanes Irma and Maria, receiving such a strong response to the first batch of 1,000 letters that it overwhelmed the call center. This program helped contribute to \$7.1 million of collections outreach revenues in the first 2 months of FY2018 (against a \$1.4 million target),¹³³ with half of those responding to the letters agreeing to pay the proposed penalty amount.¹³⁴ Fully implementing data-driven tiered audits will enable Puerto Rico to reach a significantly larger share of nonpayers.
- **Collecting SUT on Internet sales.** Nationally, the percent of taxpayers voluntarily reporting and paying use tax on their income tax forms ranges from 0.2% to 10.2%,¹³⁵ while nearly 80% of Americans shop online.¹³⁶ Through legislation combining click-through nexus, affiliate nexus, and economic nexus, as well as voluntary agreements with major online retailers, the Government should be able to capture SUT on a much larger share of Internet sales.¹³⁷ In fact, Hacienda has already announced an agreement with a

¹³² IRS Enforcement Results, TIGTA Filing Season Audit, IRS Taxpayer Advocate, Team Analysis, GAO

¹³³ Hacienda, Fiscal Reforms August 2017 reporting

¹³⁴ Conversation with Hacienda, Dec 13, 2017

¹³⁵ <http://www.house.leg.state.mn.us/hrd/pubs/usetax.pdf> at 7

¹³⁶ Tech Crunch, 2016

¹³⁷ Click Through refers to a nexus between an out of state seller and the state, which enables them jurisdiction to collect taxes, created via an affiliate in the state that links to another “out-of-state” business via an affiliate program (i.e., they send sales your way, you give them a small cut of the profits). Economic nexus refers to the dollar amount spent by a consumer at a business, which provides sufficient local economic activity for the state to be able to collect taxes from that out-of-state seller. Affiliate nexus refers to out-of-state sellers with ties to local sellers, such as through parent or subsidiary arrangements, or local order fulfillment, which creates sufficient local ties to subject the out of state seller to local taxes. Voluntary agreements occur when corporations agree through individual negotiations with states to collect and remit sales tax directly to the state

large online retailer to charge Puerto Rico sales tax on sales of goods¹³⁸. With Internet sales growing at ~15% annually, Internet sales tax presents an even more important opportunity going forward.

Other best practices could be implemented as well. For example, Puerto Rico's SUT currently requires separate Commonwealth and municipal filings, but the filings could be consolidated and the revenue forwarded from the Commonwealth to the municipalities to ease compliance burden.¹³⁹ Similarly, multiple monthly SUT filings (up to 4 per month for importers) could be collapsed into one-time filings.¹⁴⁰

Considering the post-hurricane limitations, additional compliance activities should be implemented beginning in FY2019, and would expect to see revenue impacts growing throughout FY2020 and beyond. The impact would phase in over the course of 4 years given the need for training and movement of workers into Hacienda through the Single Employer Act (Law 8, 2017), establishment of new offices and processes, and gradual shift in public perception and voluntary compliance as a result of enforcement activities. However, certain levers, such as negotiation of voluntary sales tax agreements with major online retailers, aside from Amazon, could begin as early as the end of FY2018.

14.2.2 Right-rate other taxes and fees

Prior to Hurricane Maria, the Government reports it had already developed a plan to right-rate the following taxes and fees. These original plans, as well as any adjustments mutually agreed upon between the Government and the Oversight Board during implementation of the March 2017 Fiscal Plan, have been largely included in this New Fiscal Plan, except where explicitly noted below.

Gaming tax. Legislation passed in 2017 that increased licenses and fees on mechanical and electronic gaming machines to \$3,000 from \$100. This was originally estimated to generate \$~71 million in incremental revenues.¹⁴¹ Part of this calculation involved assumptions of improved enforcement improvements, as the Government has previously estimated it is losing approximately \$170 million per year due to illegal machines that are not paying licensing fees. However, when factoring in the potential that a 2,900% increase in taxes on the machines could decrease total revenues from gaming – a change from 2017 forecasting – run-rate, incremental revenue from the gaming tax has now been reduced to approximately ~\$50 million per year by FY2023.

Licenses and other fees. 2017 legislation enabled fee increases in miscellaneous categories. Hacienda will determine which exact fees are to be increased to meet these minimum thresholds, achieving an overall revenue increase of ~\$62 million by FY2023.¹⁴² Categories are as follows: Charges for services; Fines; Insurance; Licenses; Permits; Rent; Royalties; Stamps; Other.

Tobacco taxes. Legislation was passed in 2017 to increase specific tobacco taxes, including taxes on cigarettes, cigars, rolling tobacco, cigarette paper and tubes, chewing tobacco, snuff, electronic cigarettes, nicotine cartridges, and vaporizers. Accounting for one-time declines in

¹³⁸ Caribbean Business, "Amazon to charge Puerto Rico sales tax"

¹³⁹ Isabel Hernandez presentation to the Oversight Board (Nov 30, 2017), 13

¹⁴⁰ Ibid

¹⁴¹ Based on an assumption of 23,000 gaming machines on which Hacienda is able to collect fees (<http://www.oslpr.org/2017-2020/leyes/pdf/ley-108-23-Ago-2017.pdf>)

¹⁴² Assumes an 80% capture rate on the \$73M potential to account for potential elasticities in demand based on fee increases

use due to price-related elasticities after the new fees went into place,¹⁴³ a ~\$55 million per year increase in revenues due to the new taxes is projected.

Medical marijuana tax. The Government has passed legislation to tax medical marijuana. Based on an estimated 29,000 patients, the Government can be expected to collect approximately ~\$14 million per year in additional revenue through this initiative.¹⁴⁴

Airbnb Tax. The Government has passed a law to apply a 7% hotel room tax to Airbnb rentals, resulting in a projected ~\$4 million of annual revenue increases, based on annualization of the actual Airbnb tax receipts from before the hurricane.¹⁴⁵

CRUDITA excise tax. Currently, the petroleum product excise tax (CRUDITA) generates \$470 million in gross¹⁴⁶ revenue each year for the Commonwealth, and rates are adjusted annually to reach the revenue target. As the Island faces a potential loss of revenues and shrinking export sector – coupled with the environmental considerations the Island is currently facing – the New Fiscal Plan proposes adding a measure to maintain a constant excise tax rate rather than adjusting it to target a fixed amount of tax revenue. This policy reform would align different categories of petroleum product revenue across the board, and allow each to grow based on real GNP rather than create a fragmented constellation of policies across taxes on gasoline, petroleum excise, gas oil, and diesel. The measure is projected to generate ~\$23 million per year by FY2023.

14.3 Implementation and enforcement of tax initiatives

The following implementation plan details the continuation of the Commonwealth's efforts to increase compliance, and imposes further details on key milestones in the process to right-rate taxes and fees.

14.3.1 *Creation of a tax expenditure report and regular reporting*

As part of implementation, the Government must regularly produce a tax expenditure report, which will include a comprehensive lists of revenue losses attributable to provisions of the Puerto Rican tax code that deviate from the tax structures benchmark law. The revenue loss could be due a special exclusion, deduction, exemption, credit, a preferential rate of tax, or a deferral of tax liability. Having a clear and accurate understanding of what the Government spends through tax expenditures is critical to ensuring that the expenditures are contributing to economic growth and opportunity. The first draft of tax expenditures budget must be provided to the Oversight Board by the end of calendar year 2018.

In addition, the Government must produce a quarterly performance report, which shall be submitted to the Oversight Board within 45 days after each quarter ends, measuring the performance of any proposed tax initiatives and the offsetting revenue generation or cost reduction measures identified in any enabling legislation against projections set forth in the New Fiscal Plan.

¹⁴³ Based on an 18% decline, per Hacienda (April 5, 2017 calculations)

¹⁴⁴ \$15M projected receipts, minus \$1.5M of dedicated revenues for the medical marijuana council established in 2017-Act 42 and controlled substances monitoring in 2017-Act 70

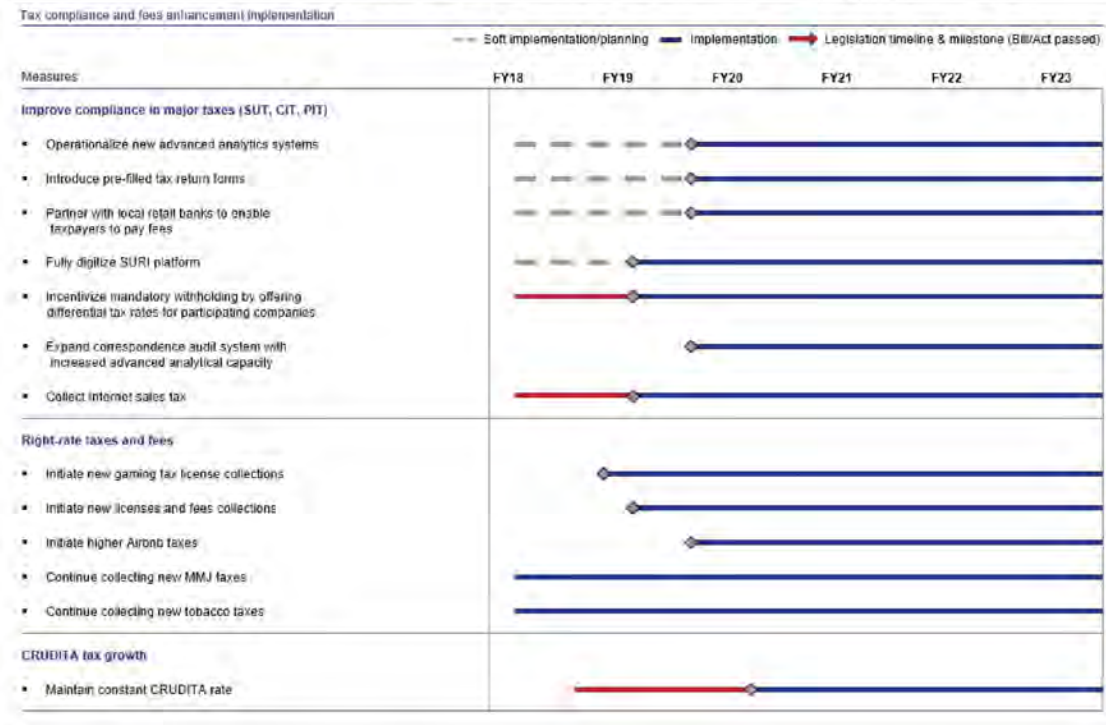
¹⁴⁵ Hacienda August 2017 Revenue Scorecard, submitted Sept 15, 2017

¹⁴⁶ Does not deduct funding provided by the Commonwealth to the Highways and Transportation Authority

14.3.2 Principle of Revenue Neutrality

Puerto Rico needs to drive toward more formality and increased compliance within the tax base, but it cannot lose revenues in the process. Therefore, any tax reform or tax law initiatives that the Government undertakes or pursues during the fiscal plan year must be revenue neutral. To ensure revenue neutrality, the implementation of any tax law initiatives must occur sequentially, with the Government ensuring that initiatives are paid for before rates are reduced.

EXHIBIT 59: TAX COMPLIANCE AND FEES ENHANCEMENT IMPLEMENTATION TIMELINE



Chapter 15. REDUCTION IN APPROPRIATIONS TO UPR AND MUNICIPALITIES¹⁴⁷

15.1 Current state and vision for Commonwealth appropriations

The central Government provides a range of appropriations to three main groups of recipients: The University of Puerto Rico, Puerto Rico's 78 municipalities, and "other" recipients (typically private industry or non-profit institutions).

Currently, UPR is 70% subsidized (~\$708 million in annual appropriations) by state and local funds, compared to 25% average level of state/local subsidization of U.S. public

¹⁴⁷ Although the FOMB does not consider and has not considered anything in the New Fiscal Plan as a "recommendation" pursuant to Section 205(a), to the extent that the Government of Puerto Rico considers or has considered anything in this Chapter a "recommendation" pursuant to Section 205(a), the FOMB hereby incorporates it into the New Fiscal Plan pursuant to Section 201(b)(1)(K)

universities¹⁴⁸. UPR's tuition is less than one-third of the U.S. public average even after adjusting for per-capita income, and UPR spends ~10% more per student on operational spend than the average public university.

A reduction of the appropriation for UPR was determined in 2017 through a shared process with the Government to identify reasonable, sustainable reductions to the UPR appropriation that brought UPR closer to U.S. public university tuition and cost benchmarks. This reduction was included in the original March 2017 Fiscal Plan.

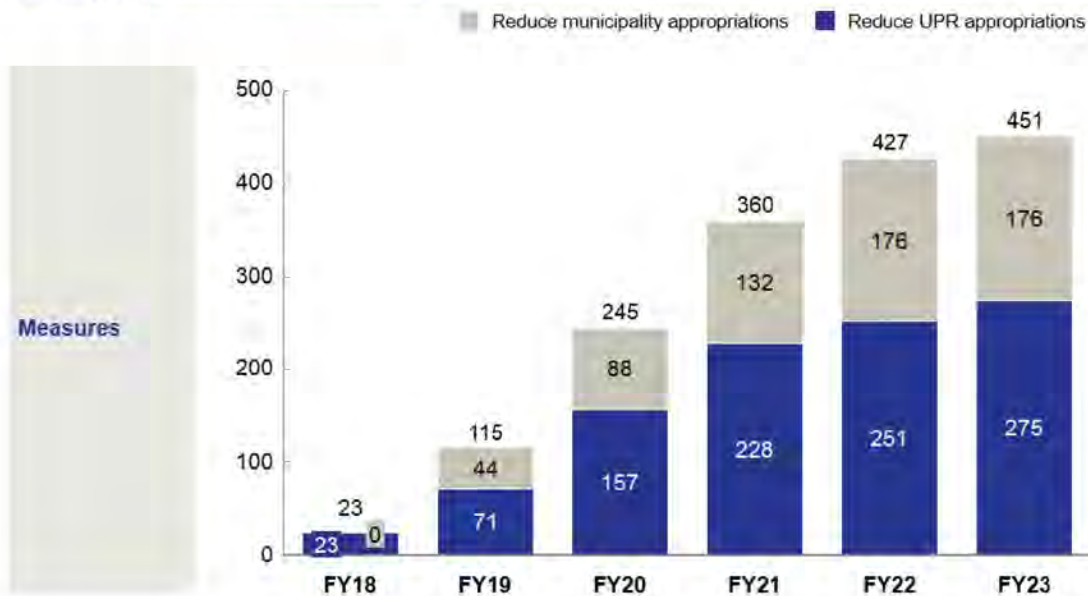
Municipalities receive \$220 million in annual appropriations from the Commonwealth, but despite this aid are operating at annual operating deficits of \$260M.¹⁴⁹ With more reductions on the horizon, municipalities must undergo substantial operating model changes, or else risk increasing their annual operating deficits to ~\$500 million annually. In addition to reducing the appropriations to municipalities to drive fiscal discipline, the Commonwealth can support consolidations of municipal services to encourage efficiencies, such as through service provision collectives or streamlining the legal framework to remove barriers to collaboration.

15.2 Key initiatives to reduce appropriations

Reducing Commonwealth subsidies to municipalities and UPR will lead to annual savings of \$1,622 million by FY2023.

EXHIBIT 60: REDUCTION IN APPROPRIATIONS SUMMARY OF MEASURES IMPACT

Summary of appropriations measures impact, \$M



¹⁴⁸ UPR, IPEDs, College Board

¹⁴⁹ V2A November 2016

15.2.1 Reduce UPR appropriations to levels in line with funding of other U.S. public universities

The New Fiscal Plan has maintained the March 2017 Fiscal Plan measures, less reductions to the appropriation that have already been factored into the FY2018 baseline, as well as reductions in addressable spend.

Targeted measures to increase revenues and reduce expenditures will allow UPR to operate sustainably under a reduced Commonwealth subsidy. On the revenue side, these include modestly raising tuition using a means-based approach (e.g., creating a means-based scholarship fund in parallel), applying more aggressively for Federal grants (seeking to achieve funding equal to the level of 25th percentile of U.S. public universities), charging more dues and fees to students, applying for patents and other intellectual property, and continuing to provide trainings to the PRDE and the Government more broadly.

On the expense reduction side, measures from the latest plan include consolidating campuses, optimizing HR through reducing temporary and trust positions, improving procurement, reducing the cost of medical insurance, and reducing tuition exemptions and special scholarships. These include identifying campuses and programs for consolidations based on performance metrics, tying personnel savings to roles specifically consolidated with campus consolidations and service reductions, reducing UPR employee pensions in a manner similar to the Commonwealth (e.g., highest marginal cut is 25%), and multiplying this amount by the unfunded portion,¹⁵⁰ and increasing tuition in future years to be roughly equivalent to Federal Pell grant less cost of living.

These efforts to improve the operations of UPR will in turn allow the University to renew its operating model to provide the best outcomes for its students. These outcomes will include reduced time to degree, improved job placement, and higher standardized test scores, among others. A re-envisioned University, which focuses on areas of strengths and on improving outcomes for students, will ultimately prove to be a critical source of renewal for the Island, as it is a cornerstone of human capital development to propel growth in the economy.

15.2.2 Establish independent scholarship fund for UPR

A means-based scholarship fund for UPR will be supported by reductions to the budgets of the Oversight Board, General Court of Justice, Legislative Assembly, and AAFAF. These reductions shall generate ~\$34 million annually in reinvestment funds starting in FY2019, and they will be used to help build up an endowment to pay for need-based scholarships for UPR students. Specifically, the savings will fund an independent endowment for needs-based scholarships for students at UPR, which will be managed by Hacienda (OCFO). The final total balance of the scholarship fund will be established once the rightsizing exercise is completed.

15.2.3 Reduce municipal appropriations & support through service consolidation and property registry / tax reform

As stated above, to incentivize municipal operational changes, the Commonwealth must reduce the current level of municipal appropriations. Already in FY2018, the total municipal appropriation was reduced by \$150 million, bringing the new baseline appropriations to ~\$220 million per year. Going forward from this current baseline, there must be a reduction in each successive year, holding appropriations constant at roughly 55-60% of current levels starting in FY2022 before ultimately phasing out all subsidies in FY2024.

¹⁵⁰ Additionally, the UPR Fiscal Plan includes a 50% employer match (by UPR) on up to 2% of employee contribution

The slow ramp in reductions will allow the remaining funds to be used to fund shared service consolidations. Two levers in particular should enable municipalities to become solvent: municipal service consolidations and institution of property tax reform.

Municipal service consolidations

Consolidating services across multiple municipalities can help reduce cost by leveraging scale, especially in areas of services provided directly to citizens, including public works and infrastructure, public safety, family services, education, and housing. Prior to Hurricanes Irma and Maria, Estudios Técnicos estimated that operating expense reduction measures, in part from municipal service sharing, could result in a potential combined fiscal impact of ~\$150-\$450M.¹⁵¹

The Commonwealth should pursue several initiatives to incentivize and streamline consolidation:

- Offer financial incentives (e.g., remaining municipal subsidy) for municipalities who hit targets
- Provide transparency into service performance by creating performance metrics and publishing the results, benchmarked against peer municipalities
- Develop and operate service provision collectives across counties
- Streamline legal frameworks to remove any barriers to collaboration between municipalities (e.g., liability issues); for example, the Government can pass legislation like New Jersey's 2007 Uniform Shared Services and Consolidation Act to formalize accountability for pursuing shared services by placing the onus on local leadership¹⁵²

Property tax reform

In partnership with the Municipal Revenues Collection Center (CRIM), the municipalities should identify and register tens of thousands of non-registered properties to begin collecting tax on them,¹⁵³ and re-categorize misclassified properties (e.g., residential properties marked as commercial). Additionally, CRIM can streamline collection activities and use proven compliance practices, such as advanced analytics to identify non- or under-payment, to raise payment rates. Based on implementation planning discussions in August 2017, CRIM estimated these initiatives could produce:¹⁵⁴

- \$150 million of increased revenue from raising property tax compliance from 68% to 85%
- \$150-200 million from registering properties not on the rolls
- \$500 million of capturable back property taxes owed (from \$1.3 billion total owed)
- Lastly there is an additional, not yet sized, opportunity from reclassifying commercial properties incorrectly listed as residential and updating property valuations

¹⁵¹ "Estudio para evaluar la estructura municipal de Puerto Rico", Estudios Técnicos (2016)

¹⁵² New Jersey Department of Community Affairs, *Shared Services – Working Together*. April 2011 http://www.nj.gov/dca/divisions/dlgs/programs/shared_docs/sharedsvcsrefguide.pdf

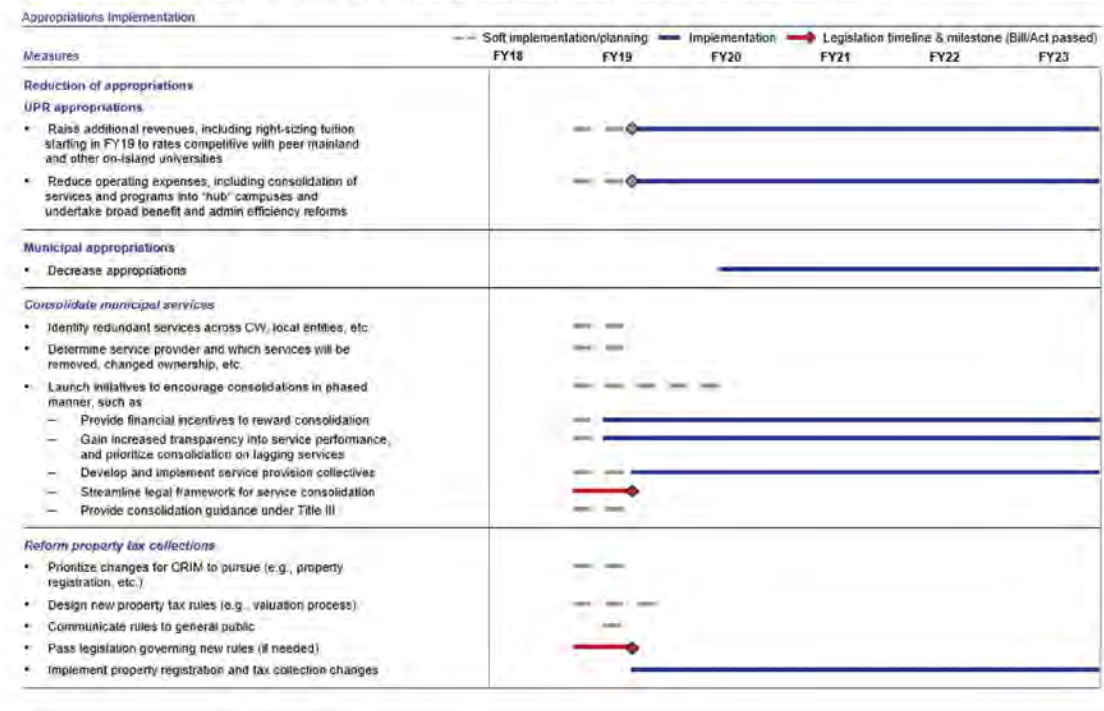
¹⁵³ Many homes in Puerto Rico have not been registered with the Government, which has led to difficulties for thousands in receiving assistance from FEMA's Individual Housing Program. For example, as of mid-January 2018, 62% of the 1.1 million applications for disaster assistance has been either rejected or were still "in-process", often due to lacking registration and title deeds ("Majority of Claimants in Puerto Rico Still Await Assistance from FEMA, Many Found 'Ineligible'", Caribbean Business)

¹⁵⁴ Meetings with CRIM leadership on July 19, 2017

15.3 Implementation plan

Given that reductions to UPR and municipal appropriations were already underway following certification of the original Fiscal Plan, implementation will include continuing the current reductions process. Simultaneously, both UPR and municipalities must begin undertaking initiatives to improve their operational stability and sustainability.

EXHIBIT 61: REDUCTION IN APPROPRIATIONS IMPLEMENTATION TIMELINE



Chapter 16. PENSION REFORM¹⁵⁵

16.1 Current state of and required changes to pension reform

The Government operates three public employee retirement systems in Puerto Rico: the Employees' Retirement System (ERS), the Teachers' Retirement System (TRS), and the Judicial Retirement System (JRS). The plans have different tiers of benefit formulas, some of which are traditional defined benefit pensions based upon years of service and final salary, while others are hybrid cash balance plans. Under the hybrid cash balance plans, employees have notional accounts credited with contributions and interest, and upon retirement, benefits are payable as an annuity. Different benefit tiers apply to employees based upon the year in which they were hired.

¹⁵⁵ Although the FOMB does not consider and has not considered anything in the New Fiscal Plan as a "recommendation" pursuant to Section 205(a), to the extent that the Government of Puerto Rico considers or has considered anything in this Chapter a "recommendation" pursuant to Section 205(a), the FOMB hereby incorporates it into the New Fiscal Plan pursuant to Section 201(b)(1)(K)

Per the latest data available, each of the systems included the following liabilities¹⁵⁶:

- ERS: 245,000 total covered (120,000 active employees, 125,000 retirees and other beneficiaries); with \$1.7 billion in annual benefits and \$38 billion in total actuarial liability
- TRS: 80,000 total covered (38,000 active employees, 42,000 retirees and other beneficiaries); with \$0.8 billion in annual benefits and \$18 billion in total actuarial liability
- JRS: 860 total covered (370 active employees, 490 retirees and other beneficiaries); with \$28 million in annual benefits and \$700 million in total actuarial liability

All employees make contributions toward their benefits, albeit at different rates. Most regular government employees also participate in Social Security, which includes both employer and employee contributions; most teachers, judges, and police officers do not.¹⁵⁷

EXHIBIT 62: PUBLIC EMPLOYEE RETIREMENT SYSTEMS OVERVIEW

Group	Defined Benefit Component	Hybrid Cash Balance Component	Social Security Coverage
ERS - Hired Jan 1, 2000 or later	None	Based on employee contribution and a share of investment earnings	Police – No Others – Yes
ERS - Hired before 2000	Based on years of service and salary, frozen as of 2013	Based on employee contribution since 2013 and a share of investment earnings	Police – No Others – Yes
TRS - Hired Aug 1, 2014 or later	None	Based on employee contribution and a share of investment earnings	No
TRS – Hired before Aug, 2014	Based on salary and years of service	None	No
JRS – Hired July 1, 2014 or later	None	Based on employee contribution and a share of investment earnings	No
JRS — Hired before July 1, 2014	Based on salary and years of service	None	No

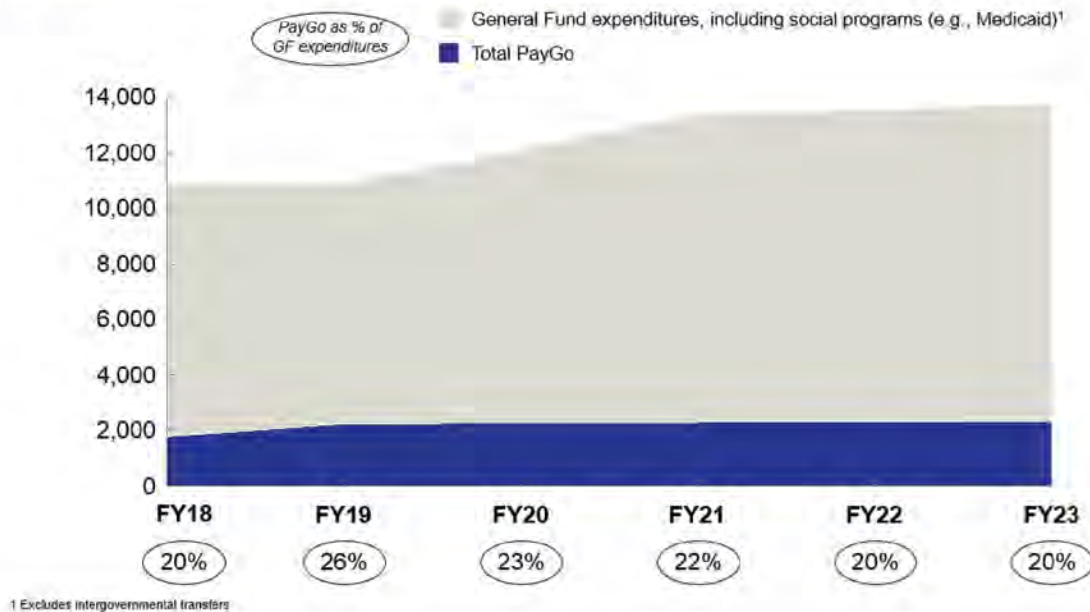
Over many decades, successive governments have failed to adequately fund these retirement plans, and today the ERS, TRS and JRS are nearly insolvent. In fact, PayGo expenditures to provide pension benefits have been increasing in recent years, and are expected to constitute between 1/4 and 1/5 of General Fund expenditures without further action, as detailed below (**Exhibit 63**).

¹⁵⁶ All liability estimates are as of July 1, 2016, and benefit estimates are for FY2018, but based on census data as of July 1, 2015

¹⁵⁷ Exclusion dates back to decision to exclude state workers from Social Security Act in 1935; when states were allowed to extend coverage to state workers in the 1950s, some areas, including Puerto Rico, made the calculation that they could provide superior coverage through their own state pension plans

EXHIBIT 63: PAYGO EXPENDITURES COMPARED TO OVERALL GENERAL FUND
EXPENDITURES, PRE-MEASURES

PayGo expenditures compared to overall General Fund expenditures, \$M



These retirement plans will soon deplete the assets they use to pay benefits. Without action, this could lead to large benefit cuts for all retirees. Such benefit cuts would not only be devastating to current retirees and their families, but would adversely impact Puerto Rico's economy as retirees spend virtually all their income on the Island. **There must be adequate funding for pension systems, such that the retirement systems promise benefits Puerto Rico can afford and the Government funds the revised benefits.**

The Commonwealth has already taken critical steps toward a more stable pension system through legislation passed in August 2017 that transitioned to a new "PayGo" pension system, liquidating assets to help fund benefits owed under previous plans, froze the accrual of ERS benefits, and committed to moving all active ERS members into segregated true defined contribution (DC) retirement plans. However, there is room for further action to ensure the long-term sustainability of the pensions system; in addition, some of the current commitments have not yet been fulfilled (e.g., the transition to the new defined contribution system has not yet been completed).

Therefore, Puerto Rico's retirement system must be further reformed to reduce costs, restore the plans to financial sustainability, and maintain responsible benefit levels for current and future retirees. While overhauls will have a smaller impact in earlier years, the impact of pension reforms will amplify over time, leading to more than \$11 billion in savings over a 30-year period. Reductions to benefits must also be structured to **protect lower-income retirees**, who otherwise could become impoverished and therefore be forced to rely upon government "safety net" benefits.

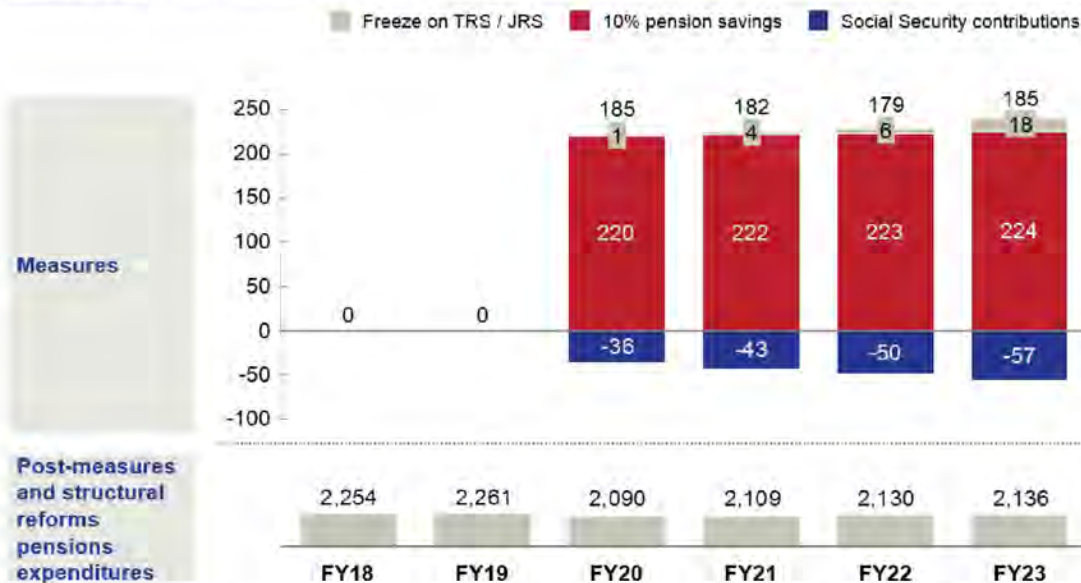
Pension reform will help restore both fiscal balance and promise for current and future retirees from government.

16.2 Proposed pension reform initiatives

Restructuring and stabilizing the pension system must lead to \$732 million in savings over six years, as shown below (**Exhibit 64**).

EXHIBIT 64: PENSIONS REFORM SUMMARY OF IMPACT

Summary of pensions measures impact, \$M



16.2.1 Freeze DB accumulation for JRS/TRS and enroll employees in a DC plan with segregated accounts

TRS members hired prior to August 1, 2014 and JRS members hired prior to July 1, 2014 are currently accruing benefits under their defined benefit retirement plans. ERS members have already transitioned to hybrid cash balance plans (in 2000 and 2013), with a transition to DC accounts targeted for June/July 2018.¹⁵⁸ To avoid creating future pension liabilities and to stabilize the system for the benefit of both taxpayers and future retirees, the JRS and TRS plans must be frozen by July 1, 2019. Members will retain the benefits they have accrued to date, subject to the benefit reduction formula discussed below. Future benefits must be based on contributions and earnings in new defined contribution retirement accounts. This will result in consistent treatment across ERS, TRS, and JRS, where employees will contribute to segregated DC accounts rather than notional accounts. Going forward, employees should have the certainty that their contributions and investment returns will be safeguarded for the future, ensuring retirement security.

Although in the early years the DB freeze savings are small (\$0.8 million in FY2020), over time the freeze should produce significant savings (\$50 million or more in FY2026 and growing further in later years to \$700 million or more) and play a significant role in restoring the budget to long-term sustainability. The freeze will be implemented through the Plan of Adjustment, and shall be slated to take effect starting in FY2020 so that needed changes can be implemented.

¹⁵⁸ Estimate provided by AAFAF in February 2018

16.2.2 10% pension benefit reduction

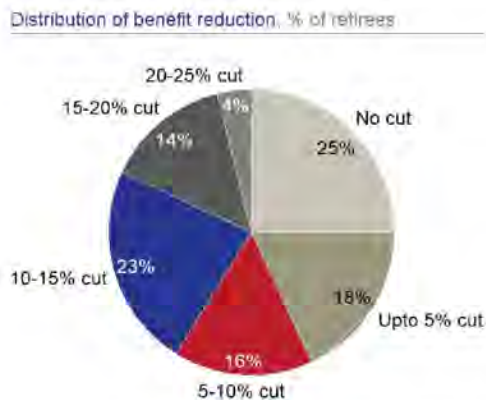
Expenditures are being reduced throughout the Commonwealth's budget and contractual debt service remains unaffordable. Retirement plan participants, like other unsecured claimholders, face a reduction in the amounts paid to them by the Commonwealth. A 10% average reduction in pensions is appropriate and necessary. The goal is a balanced approach to restore fiscal health to Puerto Rico while ensuring that cuts to retirement benefits occur in a progressive matter that protects any retirees from falling into poverty. The level of cuts to pension benefits is also in line with reductions in other government systems facing pension funding crises.¹⁵⁹

Although the average benefit reduction will be 10%, there will be no reduction for those with combined retirement plan and Social Security benefits below the poverty level of \$1,000 per month.¹⁶⁰ This formula is equivalent to giving each beneficiary a reduction of 25% in the monthly benefits they receive more than \$600 (for retirees who also receive Social Security), and \$1,000 for those without Social Security¹⁶¹. These dollar figures will be adjusted in future years consistent with increases in the Federal poverty threshold.

Under this approach, **about 25% of retirees would receive no reduction in their benefits and an additional 18% of retirees will experience a benefit reduction of 5% or less.** Therefore, in total, approximately 60% of retirees will experience a benefit reduction of 10% or less, and over 80% of retirees will experience a benefit reduction of 15% or less. Very few retirees will have more than a 20% reduction, and none will have a reduction of 25% or more.

This formula will also apply to benefits earned by current employees who have yet to retire.

EXHIBIT 65: DISTRIBUTION OF BENEFIT REDUCTION



The 10% reduction shall take effect starting in FY2020 to have sufficient time to implement it following the Plan's enactment.

¹⁵⁹ For example, in Detroit and Rhode Island, pension cuts ranged from 0-30% across beneficiary categories

¹⁶⁰ Actuarial calculation show that the following approach will result in reductions averaging 10%:

- Determine the average monthly pension by adding the regular monthly pension amount, the special law pension, the healthcare bonus, and one-twelfth of the Christmas Bonus and Medicine Bonus;
- Reduce these monthly benefits by 25%; and
- Add back up to \$150 per month (\$250 per month for those who are not covered by Social Security) to reduce the effect of benefit reductions for those with the lowest benefits

¹⁶¹ Reduction (not less than zero) = 25% x Benefit minus 25% x (1,000 if not in Social Security or \$600 if in Social Security).
For example, if ERS benefit (in Social Security) is \$2,000, then reduction = 25% x 2,000 – 25% x \$600 = \$500 - \$150 = \$350

Because the poverty threshold is anticipated to increase faster than frozen pension benefits and the size of the frozen benefits will decline as the number of years accrued before the freeze decreases (when the youngest workers who still had DB plans begin to retire), the 10% target overall savings rate will fall over time (in the years beyond FY2026), eventually reaching zero by about 2050.

16.2.3 Enroll government workers in Social Security

Currently, teachers, police officers, and judges do not participate in Social Security. They do not pay into the program, nor does the Government make a Social Security contribution on their behalf. Teachers, police officers and judges are also not eligible for benefits at retirement. Unlike other ERS members, teachers, police officers, and judges are entirely reliant on their government pensions for income in retirement. This places them at risk when government retirement plans are poorly funded.

These groups are exempt from Social Security because of the “Section 218” agreement between the Commonwealth and the Social Security Administration, which stipulates that government employees may be exempt from Social Security if they participate in a “comparable” retirement plan such as one which includes total employee and employer contributions equal to at least 7.5% of employee wages.

Enrolling these workers in Social Security will provide them with diversified sources of income in retirement, and Social Security’s progressive benefit formula will provide a stronger safety net for lower-paid employees. Workers will typically earn greater retirement benefits under Social Security based on a 6.2% employee contribution and a 6.2% employer (government) match, than they would funded only with a 6.2% DC. For example, a typical full-career government employee retiring with a salary of \$35,000 will be entitled to a Social Security benefit of approximately \$16,000, in addition to the benefit the employee builds in their defined contribution retirement account.

Therefore, police, teachers, and judges *under the age of 40* shall be enrolled in Social Security. This can be accomplished without either an employee referendum or new Federal legislation by reducing pension contributions for government employees under the age of 40 to an amount lower than the 7.5% required by Section 218. This step will trigger mandatory enrollment in Social Security. Concurrently, lowering the pension contribution for younger workers will address the loss of take-home pay they would suffer by having to pay the 6.2% Social Security payroll tax.

For example, teachers over the age of 40 will contribute 13.12% of their pay to their defined contribution plan. The changes to Social Security enrollment will create a second DC plan for teachers under 40, with a mandatory employee contribution rate of only 6.92% of their pay. Since this contribution rate is less than the requirement of a 7.5% contribution, these younger workers legally must be enrolled in Social Security. However, the 6.2% reduction in the pension contribution rate from 13.12% to 6.92% would protect these employees against any reduction in their take-home pay.

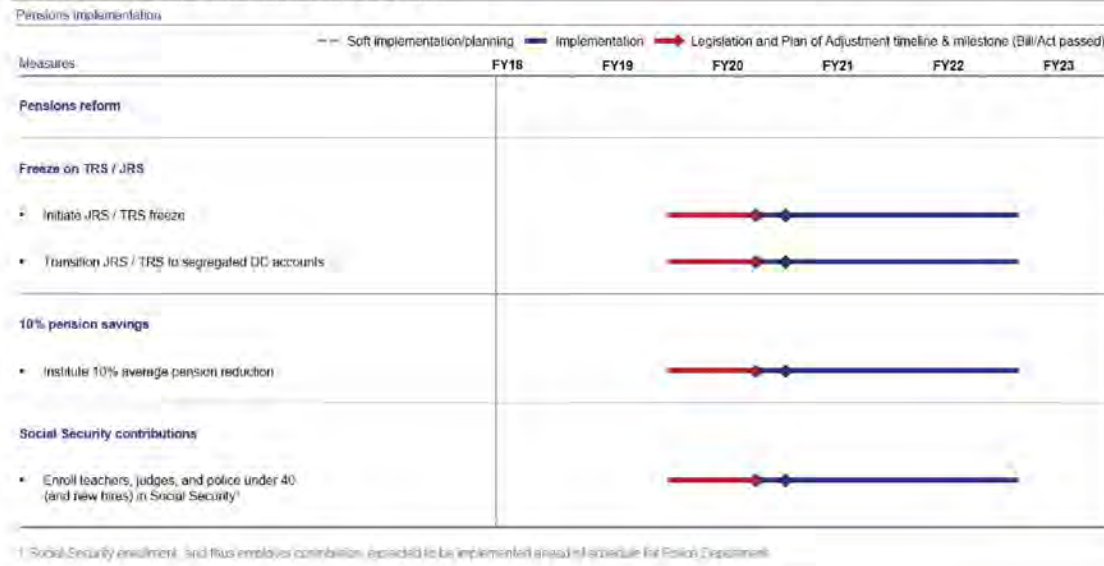
As requested by the Governor, the Fiscal Plan includes the enrollment of police under the age of 40 in Social Security beginning in FY19 instead of FY20, once necessary changes to their pension programs have been implemented.

Police, teachers, and judges *over the age of 40* should be provided the option to enroll in Social Security at a later date.

16.3 Implementation plan

While the new pensions measures will only go into effect starting on July 1, 2019, advance work will be necessary to prepare the systems for the JRS / TRS freeze and pensions reductions, as well as ensuring communications with all Puerto Rican pension recipients.

EXHIBIT 66: IMPLEMENTATION PLAN



Chapter 17. IMPLEMENTATION

Historically, the Government has suffered from inconsistent execution due in part to not having a defined, centralized project management structure. It has historically operated in silos, suffered staffing and coordination challenges, and has been limited by weak technology to report and keep track of expenses. To mitigate implementation risk, the Governor has established a centralized PMO structure.

17.1 Governor's Fiscal and Economic Working Group (GFEWG)

Developing a centrally-run PMO is an important step toward ensuring the implementation and tracking of the core operational transformation and rightsizing measures that will achieve savings targets under the New Fiscal Plan. The GFEWG is the central PMO with defined reporting to the Governor of all economic and transformation measures. It is comprised of senior leadership, oversees Agency PMOs, and reports directly to the Governor. At the time of writing, the GFEWG has already been established and is preparing for implementation.

17.2 Agency Program Management Offices (PMOs)

Individual Agency PMOs should be established with direct reporting to the GFEWG. Each agency head shall be responsible for developing and implementing a PMO structure that best fits their respective agency while still meeting their agency grouping savings targets. Through this PMO structure, the Government is positioned to effectively manage and implement the Fiscal Plan.

- The Agency PMOs are generally led by designated Agency Heads and report directly to the GFEWG
- Agency PMOs undertake the required work to implement initiatives
- The daily activities of PMOs are managed and undertaken by staff knowledgeable in the relevant subject matter areas, and assigned members meet regularly with PMO leadership to report on progress and facilitate necessary decision-making
- Agency PMOs shall be responsible for assembling a taskforce to: complete validation and definition of full scope of projects and priorities; finalize reporting tools and tracking responsibilities; and, perform ongoing weekly tracking and reporting.

The PMOs should ensure continued implementation progress through robust tracking and reporting tools that foster growth in transparency and ownership, including:

- **Project charters** that establish the goals / structures of measures, identifies risks and obstacles, and establishes metrics and KPIs
- **Implementation plans** with detailed layouts of each activity required for accomplishing sub-measures, risks / mitigants for each activity, clear leaders and owners for each activity, and metric and KPIs. These should include a “live” calendar of updates and status of each measure. If an activity goes behind schedule, the workplan will reflect that the activity is still in progress.
- **Implementation dashboard / tracker** that provides a single snapshot of the entire transformation plan; allows management to know the status of each initiative in a distinct status: Complete; In Progress; Delays; Major Issues. Tracker will allow the Oversight Board to monitor progress and ensure enforcement of measures/ reforms in the New Fiscal Plan.
- **Sub-measure dashboards** that provide “zoomed in” views of a specific sub-measure, display progress with details / commentary on project status, include agreed upon milestones / dates to track progress, and provides mitigation plans

17.3 FOMB and GFEWG implementation collaboration

The Oversight Board will play an active role in overseeing implementation of all aspects of the New Fiscal Plan. GFEWG must, in collaboration with AAFAF, provide the Oversight Board and its staff the information needed to effectively track status of key initiatives included in the plan, which is necessary to measure overall progress against the fiscal and budget objectives outlined in the plan.

For example, GFEWG will provide FOMB staff with key management artifacts on a timely basis, including:

- Implementation plans submitted by individual PMOs
- Progress reviews (including milestones and metrics) against key structural and fiscal measures
- Review of key implementation risks, including assessment of likelihood of realization, potential impact, and potential mitigations

PART V. Conclusion

The New Fiscal Plan is the result of many months of work-sessions, dialogue, stakeholder engagement, research, and in-depth analysis. Across these activities, the Oversight Board and the Commonwealth Government collaborated to create a deep and rich fact base to underpin their work, and remained focused on creating an integrated approach to restoring fiscal sustainability and economic opportunity for future generations of Puerto Ricans. The starting point for this plan involved numerous structural inhibitors to growth, over \$120 billion in outstanding debt and unfunded pension obligations, and the devastating impact from a historically destructive natural disaster.

Yet in the aftermath of Hurricane Maria, Puerto Rico now has a unique economic growth opportunity. Reconstruction activity will provide economic buoyancy in the short term. PROMESA and Title III provide a temporary stay on Puerto Rico's unsustainable debt service. The New Fiscal Plan lays out a series of practical, proven growth-inducing structural reforms and investments, with a responsible set of fiscal measures to right-size Government to the appropriate level.

But the next step – implementation of the reforms and measures – will always be the most critical one. Unfortunately, the Legislature failed to rise to the challenge of passing the comprehensive labor reform that Puerto Rico needs to achieve significant economic growth. Therefore, absent the adoption of meaningful structural reforms in addition to those contained in the New Fiscal Plan, the structural challenges that have plagued the economy of Puerto Rico will not be addressed, and the Government will have lost its window to restore long-term opportunity to the people of Puerto Rico. Only with sustained, robust economic-growth will Puerto Rico restore fiscal sustainability, regain access to capital markets, and provide a brighter future for the people of Puerto Rico.